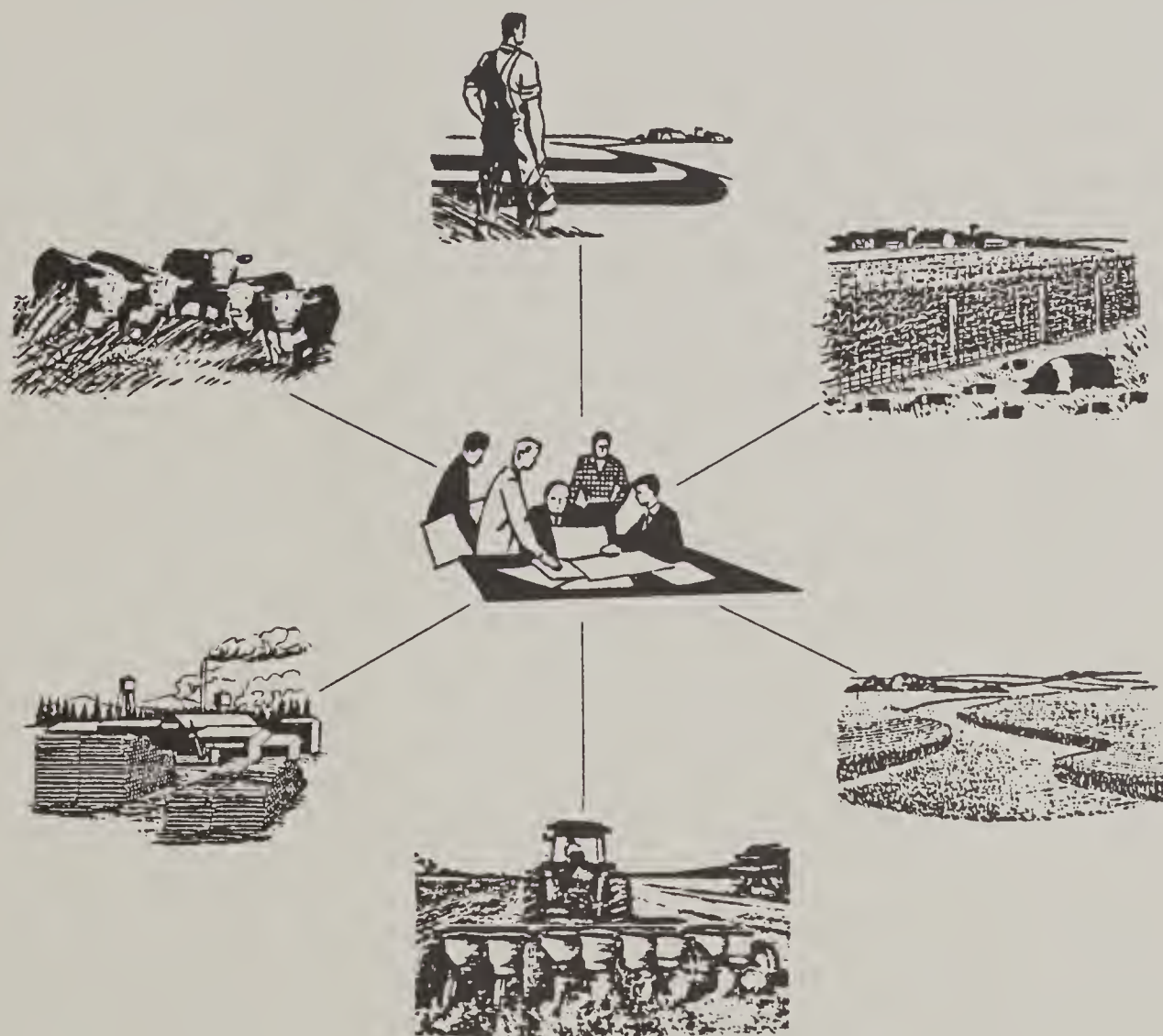


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# STATUS AND CONDITIONS OF LAND AND WATER RESOURCES IN ALABAMA – 1982



PREPARED BY

UNITED STATES DEPARTMENT OF AGRICULTURE

SOIL CONSERVATION SERVICE – ECONOMIC RESEARCH SERVICE – FOREST SERVICE

IN COOPERATION WITH

STATE OF ALABAMA

DEPARTMENT OF ECONOMIC AND COMMUNITY AFFAIRS

OFFICE OF STATE PLANNING AND FEDERAL PROGRAMS

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**STATUS AND CONDITIONS  
OF  
LAND AND WATER RESOURCES  
IN ALABAMA – 1982**

**ALABAMA STATEWIDE  
LAND AND WATER RESOURCES COOPERATIVE STUDY**

Prepared by

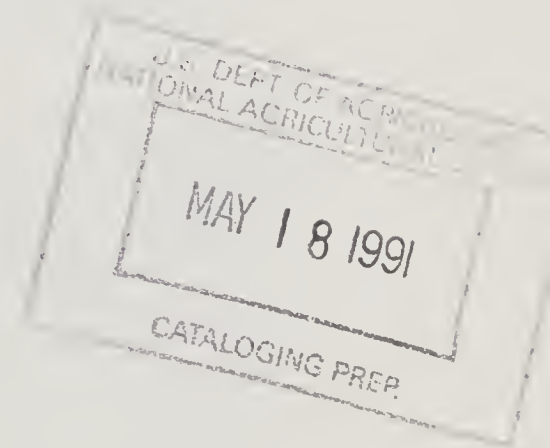
UNITED STATES DEPARTMENT OF AGRICULTURE  
SOIL CONSERVATION SERVICE  
ECONOMIC RESEARCH SERVICE  
FOREST SERVICE

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DEPARTMENT OF ECONOMIC AND COMMUNITY AFFAIRS  
OFFICE OF STATE PLANNING AND FEDERAL PROGRAMS

Auburn, Alabama

September, 1985





## PREFACE

This volume, the first of two, prepared during the Alabama Statewide Land and Water Resources Cooperative Study, presents the results of two significant USDA land and water resource assessment efforts (the 1982 SCS National Resources Inventory for Alabama, and the 1982 Forest Survey conducted by the U.S. Forest Service). The volume includes limited resources information from other USDA efforts and from other sources. Emphasis is on the status and condition of the state's agricultural and forestry resources in 1982. The overall study effort is expected to result in the development of a long-range program to guide the use and assure the conservation of Alabama's land and water resources. The resources data presented herein were analyzed in a later study phase. The data and analysis will permit resource planners at many levels to consider alternatives for the use and protection of these resources.

Three agencies of the U.S. Department of Agriculture -- the Soil Conservation Service, the Economic Research Service, and the Forest Service -- conducted this study under the authority of Section 6 of Public Law 83-566, as amended. Substantial portions of the data were collected under the authority of the Rural Development Act of 1972, Public Law 92-419, Section 302, Title III (7 U.S.C. 1010a). This act directs the Secretary of Agriculture to continually inventory and monitor the status and conditions of soil, water and related resources in the United States. The 1982 Forest Survey data was collected under the authority of 88 Stat. 476, 16 U.S.C. 16-1614 -- Resources Planning Act of 1974 and 92 Stat. 353, PL 95-307 -- Renewable Resources Research Act of 1978.

The Alabama Statewide Land and Water Resources Cooperative Study was requested by the State of Alabama, through the Department of Economics and Community Affairs, Office of State Planning and Federal Programs, in January, 1979. This agency sponsored the study and coordinated study activities with ongoing activities of other state and local government entities and interested organizations.



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## CHAPTER 1

### SUMMARY

Alabama's land and water resources are vital to the continued growth of the state's agriculture and forest industries. The conservation and wise utilization of these resources are essential for the benefit of future generations. Resource inventories, analyses of alternative resource uses and the development of a long-range soil and water conservation program play a prominent role in this conservation effort.

This document, the first of two prepared as part of the Alabama Statewide Land and Water Resources Cooperative Study, presents the results of two resource inventory and assessment efforts conducted by the United States Department of Agriculture. Related information from other sources is also presented.

#### Importance of Agriculture and Forestry to the State Economy

Agriculture is big business in Alabama. Alabama's agricultural and forest industries account for an estimated 20 to 25 percent of the state's total economic activity. Sale of crops and livestock in Alabama reached \$2.2 billion in 1982, stimulating an additional \$3.3 billion to Alabama's economy through related activities. Timber sales totaled \$498 million, with processing and other related activities contributing at least \$2 billion of additional revenue.

#### Land and Water Area

Alabama's land and water area encompasses 33,091,000 acres, including 904,000 acres of federal land, 29,697,000 acres of rural nonfederal land, 1,545,000 acres committed to urban and built-up uses and rural transportation, and 945,000 acres of water bodies and streams. Cropland acreage declined from 5,900,000 acres in 1957 to 4,500,000 acres in 1982 while pastureland was increasing from 3,100,000 to 3,800,000 acres over the same period. Nonfederal forest land acreage, totaling 20,633,000 acres in 1982, has been relatively constant during the past 25 years.

#### Prime Farmland, Potential and Marginal Cropland

About 7.3 million acres (25 percent) of all rural land in Alabama is considered to be prime farmland (USDA definition). Forty percent of this land is in crops and 37 percent in pasture. However, of all of Alabama's cropland, only 62 percent is considered to be prime farmland.

In addition to the 4,500,000 acres of cropland inventoried, 800,000 acres of pastureland and 500,000 acres of forest land were considered to have a high potential for conversion to cropland.

About 725,000 acres of Alabama's cropland (16 percent) is considered to be marginal or unsuited for crop production. An estimated 519,000 acres of this land cannot be adequately protected and farmed profitably as cropland and should be converted to pasture, hay, or timber production.



## Forest Resources

There are 20,633,000 acres of nonfederal forest land in Alabama. Pine forests occupy almost 7 million acres, or 34 percent of the total, while oak-pine is growing on 4.3 million acres, or 21 percent of the forest land. Approximately 7 million acres, or 34 percent of the forest land is oak-hickory, while the remaining 2.3 million acres, or 11 percent is bottomland hardwood.

The volume of growing-stock inventory continues to be dominated by softwoods, but by a smaller margin than in 1972. Softwoods now account for 53 percent of the growing-stock whereas they accounted for 55 percent in 1972. Most of the increase in volume occurred in the northern part of the state.

Alabama's forests have been growing slightly more timber than has been cut. In 1972, 63 percent of net growth was harvested, while the periodic estimate in 1982 indicated 87 percent of the growth was being cut. About 74 percent of the timber harvested in the 1982 periodic estimate was softwood. The majority of timber removals are in the Southeast and Southwest-North Forest Resource Regions.

From 1967 to 1984, southern pine sawtimber prices experienced an annual 2.1 percent real price increase. When the effect of inflation is considered, this amounts to an annual increase of 8.9 percent. This trend is expected to continue into the next century.

From 1972 to 1982, hardwood inventories increased 1.0 billion cubic feet while softwoods increased only 0.2 billion cubic feet. During this same period, there was an increase of 1,300,000 acres of oak-hickory forest types while pine and oak-pine forest types have decreased over one million acres. This trend will continue unless forest landowners regenerate pine forest sites.

## Erosion

Alabama has the sixth highest cropland erosion rate in the nation. The state average of 7.1 tons per acre per year is 61 percent above the national average of 4.4 tons. Approximately two-thirds of Alabama's cropland, or 2,800,000 acres are eroding at excessive rates. Almost 1,300,000 acres are eroding at more than twice the tolerable soil loss rate ("T"). Sheet and rill erosion from cropland totaled 30,600,000 tons in 1982. Cropland eroding at rates greater than "2T" accounted for 63 percent of this erosion. Sheet and rill erosion rates on cropland are highest (10 tons per acre per year) on the soils of the Highland Rim Major Land Resource Area (MLRA) in Lauderdale, Limestone, and Madison Counties. In addition to sheet and rill erosion, 80,000 acres of sloping cropland without adequate water disposal systems are experiencing serious soil losses averaging 105 tons per acre from ephemeral gullies. Erosion from ephemeral gullies was estimated to be 9,200,000 tons in 1982.

The effect of erosion on crop productivity is being evaluated by the Agronomy and Soils Department, Auburn University. Early results indicate that erosion rates of 10 tons per acre per year can reduce crop yields by 25 percent if allowed to continue for 50 years. Erosion rates in the range of 20 tons per acre can reduce yields by 50 percent over this period.

Pastureland erosion averages less than 1 ton per acre per year, with a total volume of 2,700,000 tons statewide in 1982. Problems do exist in some locations due to steep slopes or poor management. Some 104,000 acres of pastureland are eroding at rates above "T", with an additional 68,000 eroding at more than twice "T".

Forest lands are eroding at rates well below "T". Forest land erosion in Alabama totaled 12,000,000 tons in 1982. Forest land disturbed in the past three to five years comprises only 12 percent of the total forest land, but contributes more than 54 percent of the total forest land erosion.

Critical erosion is occurring on 87,000 acres of mines and 60,000 acres of gullies. Over 90 percent of all mined land is located in the Sand Mountain, Appalachian Ridges and Valleys, and the Coastal Plain MLRA's. Total erosion from mined land is estimated to be 41,500,000 tons per year. The Blackland Prairies and the Appalachian Ridges and Valleys MLRA's have the heaviest concentration of gullies. Critical erosion from gullies, streams, and roadsides in Alabama is 25,154,000 tons per year.

### Sedimentation

Approximately 81 percent of the soil carried away through erosion is deposited on uplands, flood plains, farm ponds and in small reservoirs and tributary streams. About 14 percent of the eroded soil is deposited in large reservoirs and inland waterways downstream. The remaining 5 percent flows to Mobile Bay and streams and reservoirs in adjacent states. Annual sediment deposition in Mobile Bay is approximately 3.7 million tons. Federal expenditures for sediment removal in Mobile Bay and Ship Channel are about \$4.5 million annually, while an additional \$8.5 million is spent annually for the removal of 9 million tons of sediment from other Alabama waterways.

### Conservation Treatment Needs

The 2.8 million acres of cropland eroding at excessive rates include 2.3 million acres that need protection with erosion control systems. An additional 519,000 acres of marginal cropland need to be converted to less intensive uses. The percentage of total cropland acreage needing erosion control varies from 55 percent in the Coastal Plain/Gulf Coast Flatwoods MLRA's to 78 percent in the Highland Rim and Sand Mountain/Cumberland Plateau MLRA's.

Forty-nine percent of Alabama's pastureland is considered to be adequately protected. Only 3 percent needs conservation treatment for erosion control. An additional 46 percent of the pastureland needs treatment to improve forage production. Total needs for forage improvement range from 70 percent of the pastureland in the Highland Rim MLRA to 40 percent of the pastureland in the Coastal Plain/Gulf Coast Flatwoods MLRA.

Drainage is needed on 158,000 acres of cropland, and 40,000 acres of pastureland. Drainage problems are concentrated on the Blackland Prairie soils, where 7 percent of all cropland needs drainage.

The advancing maturity of forests and the lack of adequate regeneration are causing low growth rates. Growth rates average slightly less than 50 percent of the growth potential for fully stocked natural stands.



### Flooding Damage to Agriculture

Approximately 5,400,000 acres are subject to occasional flooding. This includes 435,000 acres of cropland and 387,000 acres of pastureland. Average annual flood damage to crops and pasture is about \$15.2 million, with over 92 percent of this damage occurring to cropland. Crops and pasture on the state's tributary flood plains experience 54 percent of the total flood damage. Flooding of cropland and pastureland is concentrated along the tributaries of the Tennessee River and across the central part of the state. The Public Law 566-Small Watershed Program has been utilized to reduce flood damages throughout the state with three-fourths of these projects occurring in the northern and south-central portions of the state where the largest flood plain acreages occur.

### Water Availability and Use

Alabama has eight percent of the nation's stream flow. The states' dependable water supply is approximately 67 billion gallons per day (bgd), with 52 bgd from surface water and 15 bgd from ground water sources. Primary uses are for power generation, industrial/commercial uses, public water supply, fish and wildlife, and recreation. Although agricultural water use is less than two percent of total state water use, water is vitally important to Alabama's agriculture. Total agricultural water use was 129 million gallons per day (mgd) in 1982, with 67 percent coming from surface sources. Primary uses are for irrigation, livestock, and catfish production.

In 1982, 89,000 acres (2 percent) of cropland were irrigated in Alabama. Approximately 2,900,000 acres (67 percent) of crops are grown on soils considered suitable for irrigation. Irrigation is concentrated on the sandy soils of southeast Alabama and in Baldwin County. Peanuts and corn are the principal crops irrigated.

### Water Quality Problems Related to Agriculture

Sediment, by volume, is the greatest pollutant in Alabama's surface waters. In addition to the direct damage to fish and aquatic life, sediment transports nutrients and pesticides. Nitrogen and phosphorus are the most common agriculturally-related nutrients affecting the aquatic environment. Three areas having potential water pollution problems from nutrients are the Tennessee Valley, Blackbelt, and Wiregrass Areas. Several counties in the Tennessee Valley and along the Alabama River in central Alabama have the highest potential for water quality problems related to pesticides.

Animal wastes are a common source of agricultural-related pollution problems. The potential for water quality problems related to animal waste is most significant in the Sand Mountain area.

## CHAPTER 2

### INTRODUCTION

Alabama's land and water resources are the primary elements of her strength and competitive position among the growth states in the Southeast. Agriculture and forestry contribute a substantial portion of the state's basic economy. Employment in jobs related to agriculture and forestry has been estimated to be 12 to 25 percent of all employment in the state, depending on sectors included as "related".

#### OBJECTIVES AND SCOPE

Alabama's agricultural leaders are concerned about the condition of the state's soil and water resources. They are alarmed at the rate of soil loss by sheet and rill erosion. Increased siltation and pollution of the state's streams, lakes, and underground water supplies have been identified as being agriculturally-related. Similar concerns have been recognized by state officials. They realize that the future utilization and protection of the state's non-renewable natural resources is too important to leave to chance. This is even more critical for Alabama's agricultural and forest industries because of the fragile nature and sensitivity of the resources involved.

Sensing the need for a comprehensive analysis of the state's soil and water resource conditions, the Governor's Office of State Planning and Federal Programs (OSPFP) requested assistance from the U.S. Department of Agriculture (USDA) in 1979. Responding to this request, the Alabama Statewide Land and Water Resources Cooperative Study was initiated by cooperating agencies of USDA in 1980. The Alabama Agricultural Experiment Station began formally providing assistance to the study staff in 1982.

The study was directed toward compilation of the most comprehensive land and water data base to date, and an analysis of alternative future uses of the state's agricultural and forestry resources. The analysis of the resource information and alternatives will provide a basis for the development of a long-range program that will guide the conservation and optimum utilization of the state's agricultural and forest resources.

Study concerns include:

1. Availability and use of the state's agricultural and forest resources and the potential demand for these resources.
2. Agricultural and forestry income and production.
3. Erosion levels from all rural land.
4. Current adequacy of conservation treatment and the identification of future treatment needs.
5. Forest stocking conditions.



6. Potential of irrigation as a means of increasing agricultural income and production.
7. Water use and potential conflicting demands on the available water resources.
8. Agricultural flood damages.

#### PURPOSE OF THIS DOCUMENT

A vital part of the analysis of Alabama's soil and water resource conditions is the assessment of the quantity, quality, and availability of those resources. Utilizing inventories and surveys from various sources, this document summarizes data on land use, water areas, flood prone areas, prime farmland, soil erosion, irrigation, conservation needs for various land uses, potential for additional cropland, land ownership, wildlife and fishery resources, aquaculture, and wetlands. Water quality is addressed as it relates to agricultural sources of pollution. Limited comparisons of recent data to those obtained in previous inventories are presented for selected land uses and treatment levels where trends appear valid.

#### SPONSORSHIP AND STUDY AUTHORITY

The Office of State Planning and Federal Programs of the Alabama Department of Economic and Community Affairs sponsored the study. It was conducted by USDA's Soil Conservation Service (SCS), Economic Research Service (ERS), and Forest Service (FS), under authority of Section 6, PL 83-566, as amended. The major portion of the USDA data presented was collected under the authority of the Rural Development Act of 1972, PL 92-419, Section 302. The 1982 Forest Survey data were collected under the authority of 88 Stat. 476, 16 U.S.C. 16-1614 -- Resources Planning Act of 1974, and 92 Stat. 353, PL 95-307 -- Renewable Resources Research Act of 1978.

#### SOURCES OF DATA AND SCOPE OF INVENTORIES

A concerted effort was made to develop the statewide study using the latest resource data. Generally, only that information not published elsewhere is presented herein. Some exceptions are information regarding land use, resource trends and other data vital to a comprehensive discussion of Alabama's land and water resource base.

The following sources of data are those principally used in this study:

1. National Resources Inventory, 1982. USDA-Soil Conservation Service. The 1982 National Resources Inventory (NRI) is one of the most comprehensive studies of the United States' soil and water resources ever made. This inventory was conducted by the Soil Conservation Service (SCS), with guidance from the Forest Service and other federal agencies, to gather data on the nation's nonfederal soil, water, and related resources. The major objective of the 1982 NRI was to obtain data usable for analysis at the Major Land Resource Area (MLRA) level within the state. The NRI data base was developed using three



types of data. Further details on the inventory design and statistical reliability are provided in Appendix A.

2. Alabama Supplement to the NRI, 1982. USDA-Soil Conservation Service. Additional data of particular interest to the state were collected at the same time the data for the national survey were collected. This supplemental information concerned critically eroding areas, kind and use of water bodies larger than 40 acres, perennial streams wider than 660 feet, wetlands, land ownership, flooding frequency, double-cropped systems, treatment needs for erosion control, forest land site conditions, vegetative data for hayland, pastureland, and forestland, and proximity to public water supply systems.

3. Alabama Forest Survey, 1982. USDA-Forest Service. This comprehensive survey and analysis of Alabama's nonfederal forest resources was conducted by the U.S. Forest Service. This type of survey is conducted once every ten years and gives an in-depth picture of the growth, species, volume, utilization, and distribution of Alabama's forests. Sample locations were generally taken at the intersections of a 3-mile grid. At this sampling intensity, a plot location represents approximately 6,000 acres (see Appendix A).

4. Flood Plain Land Use and Potential Damages Within Hydrologic Units in Alabama, 1980-82. USDA-Soil Conservation Service. The State of Alabama has been subdivided along drainage boundaries into 7 hydrologic subregions and 629 subwatersheds. Flood plains along major streams were delineated, and the land use within the flood plains determined. Potential flood damages have been estimated for each subwatershed in the state. Estimated crop damage factors were determined from previous hydrologic and economic analyses performed on representative PL 83-566 watershed projects across the state.

5. Aquaculture Survey of Alabama, 1983. USDA-Soil Conservation Service. A survey of fish farming activities in Alabama, identifying the number of catfish ponds in production and the acreage utilized for food fish, fingerlings, and fish-out. For rainbow trout, the number of raceway systems, the linear feet of raceways, and the number and size of fish-out ponds were determined.

6. Alabama Irrigation Survey, 1982. Alabama Cooperative Extension Service, and Use of Water in Alabama, 1982. Geological Survey of Alabama. These publications provide data regarding irrigation in Alabama including land and crops irrigated by county. The 1982 NRI irrigation inventory was compared to these sources. Additional water use data for agricultural and non-agricultural uses were extracted from the Use of Water in Alabama, 1982, by county and hydrologic subregion.

7. Climatic data publications. U.S. Department of Commerce, National Oceanic and Atmospheric Administration (NOAA).

Several publications of NOAA have been utilized including "Monthly Normals of Temperature, Precipitation and Heating and Cooling Degree Days, 1951-1980"; "Evaporation Atlas for the Contiguous 48 United States"; and "Climatological Data -- Alabama."

8. Miscellaneous publications. Geological Survey of Alabama.

Several publications of the Geological Survey of Alabama have been utilized in evaluating water availability and use in Alabama. These include: Bulletin 117 -- "Low-Flow Characteristics of Alabama Streams", Bulletin 113 -- "7-Day Low Flows and Flow Duration of Alabama Streams", "Water Content and Potential Yield of Significant Aquifers in Alabama", "Use of Water in Alabama, 1970".

### USE OF THE DATA

The information presented in this document can be utilized by various groups and organizations in need of land and water data for the state and regions within the state. Some of the data can meet needs at the county level. Results should be of particular interest to state and federal governmental agencies, regional planners, colleges and universities, and any private or public organization in need of natural resource data. Information should be useful in developing multi-year plans, in projecting future staffing needs, and in identifying problem areas and opportunities for solutions. This report provides a large portion of the resource data base that will be used in developing the Alabama Long-Range Soil and Water Conservation Program in 1985.

### ACKNOWLEDGEMENTS

The contributions of state and federal agencies in the form of inventory data, timely review, and critique of this document are greatly appreciated. A debt of gratitude is owed to those involved in the preparation, assembly, and review of the document.



## CHAPTER 3

### AGRICULTURAL LAND USE HISTORY AND SETTING

#### HISTORY OF LAND USE AND SIGNIFICANT CHANGES

Alabama's agricultural economy is closely tuned to the national agricultural supply and demand. Over the last 50 years, agriculture in Alabama has expanded, contracted, shifted from commodities in oversupply to others in demand, undergone vast changes in mechanization, and adopted the latest technological advances and varietal improvements.

According to Census of Agriculture reports published by the U.S. Department of Commerce, Alabama's land devoted to agricultural use, either in tilled crops, pasture, hay or grazed woods, remained fairly steady from 1920 to 1954. This was a period when agriculture was characterized by one and two-mule walking cultivators, tenant farmers, and share-croppers furnishing an abundance of labor. Post-World War II conditions saw massive shifts to farm tractors and other mechanized equipment, the spread of electricity to rural communities, the availability of off-farm employment for farm labor, and a moderate increase in demand for farm products due to population increases.

Farm consolidation and expansions in production of cotton, corn and peanuts immediately after World War II brought about an oversupply of these commodities in Alabama and in other producing states. The introduction of acreage controls by the government in the early 1950's along with generally low market prices for crops caused a marked reduction in cropland. The Soil Bank program instituted in the late 1950's converted additional cropland to pastureland and forest land.

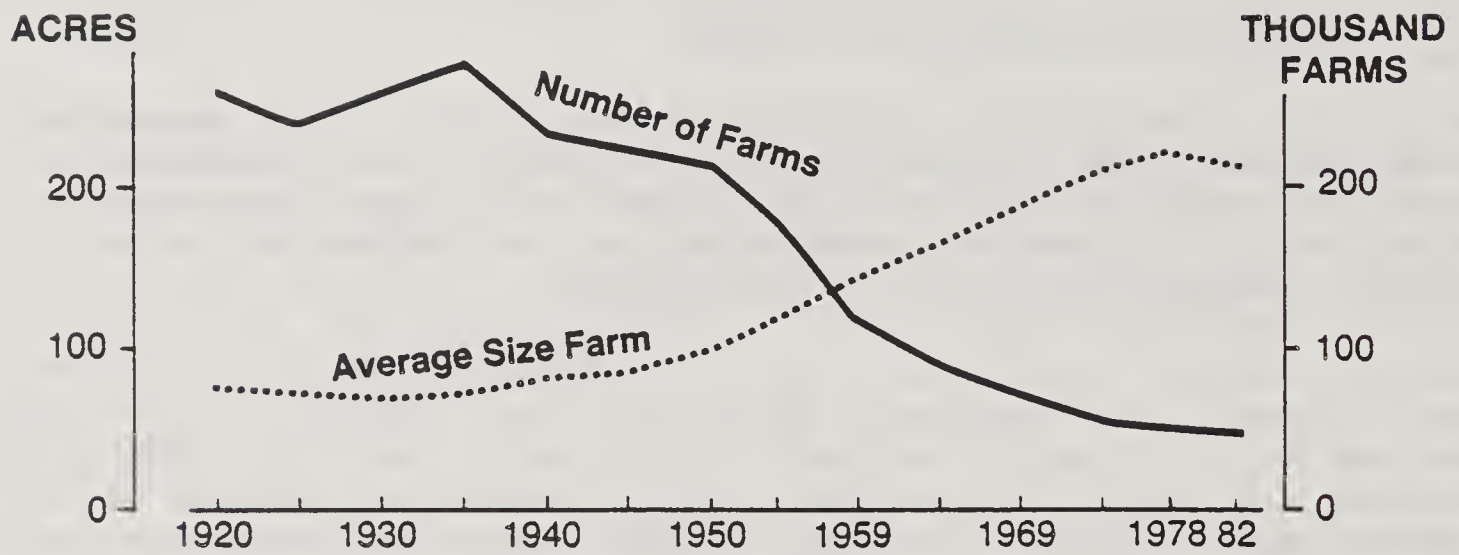
The trend in reduction of cropland continued until the late 1970's when export demands increased. Since that time, cropland acreage in Alabama has remained fairly stable. Farm numbers, however, continued to drop. Agricultural census reports show that the number of farms steadily declined from 273,500 in 1935 to about 48,500 in 1982 (Figure 3-1). This decline was primarily because of the drop in the number of farms less than 50 acres in size (Figure 3-2). Correspondingly, farm size tripled during the same period rising from an average size of 72 acres in 1935 to 211 acres in 1982.

Farming is no longer the principal occupation for most farm operators. Today, six of every ten operators earn more income off the farm than on the farm, a reversal of the situation in 1950 (Figure 3-3).

#### Major Crop Changes

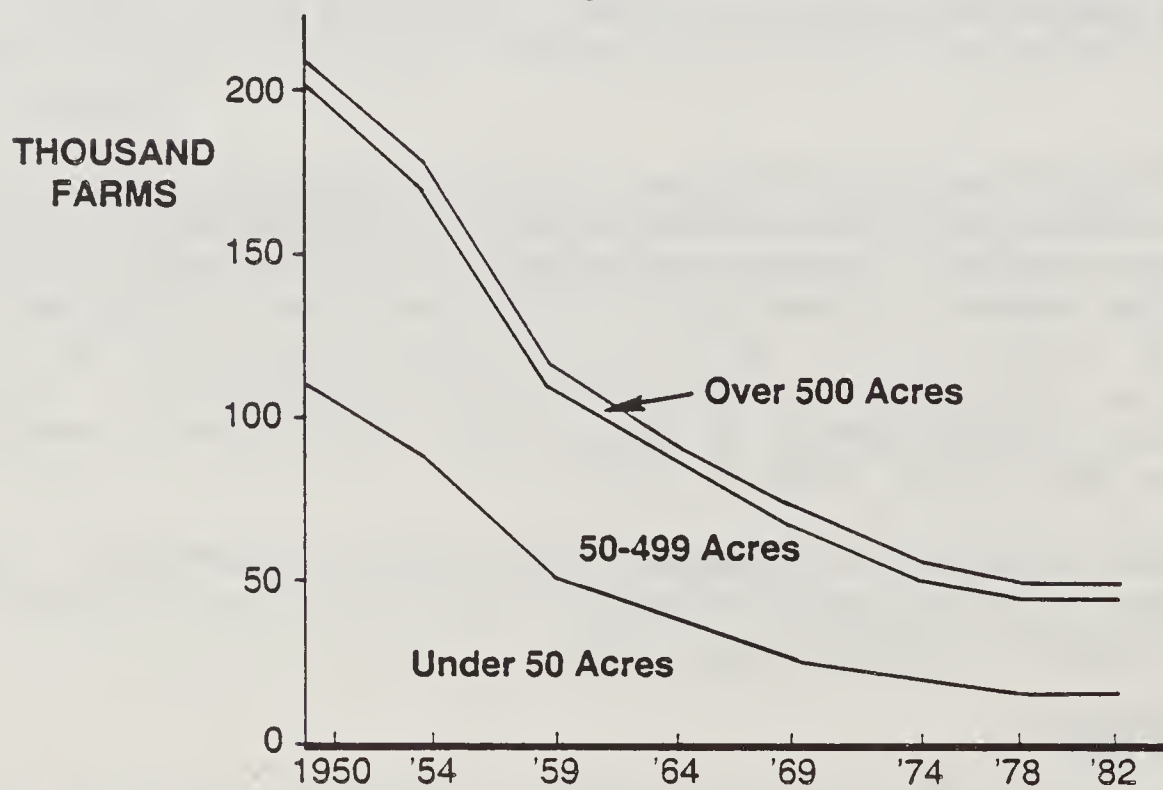
Trends in the acreage of the major crops grown in Alabama from 1945 to 1982 are shown in Figure 3-4. These data were compiled from reports of the Census of Agriculture and published by the U.S. Department of Commerce.

Figure 3-1  
Alabama Farm Statistics, 1920-1982



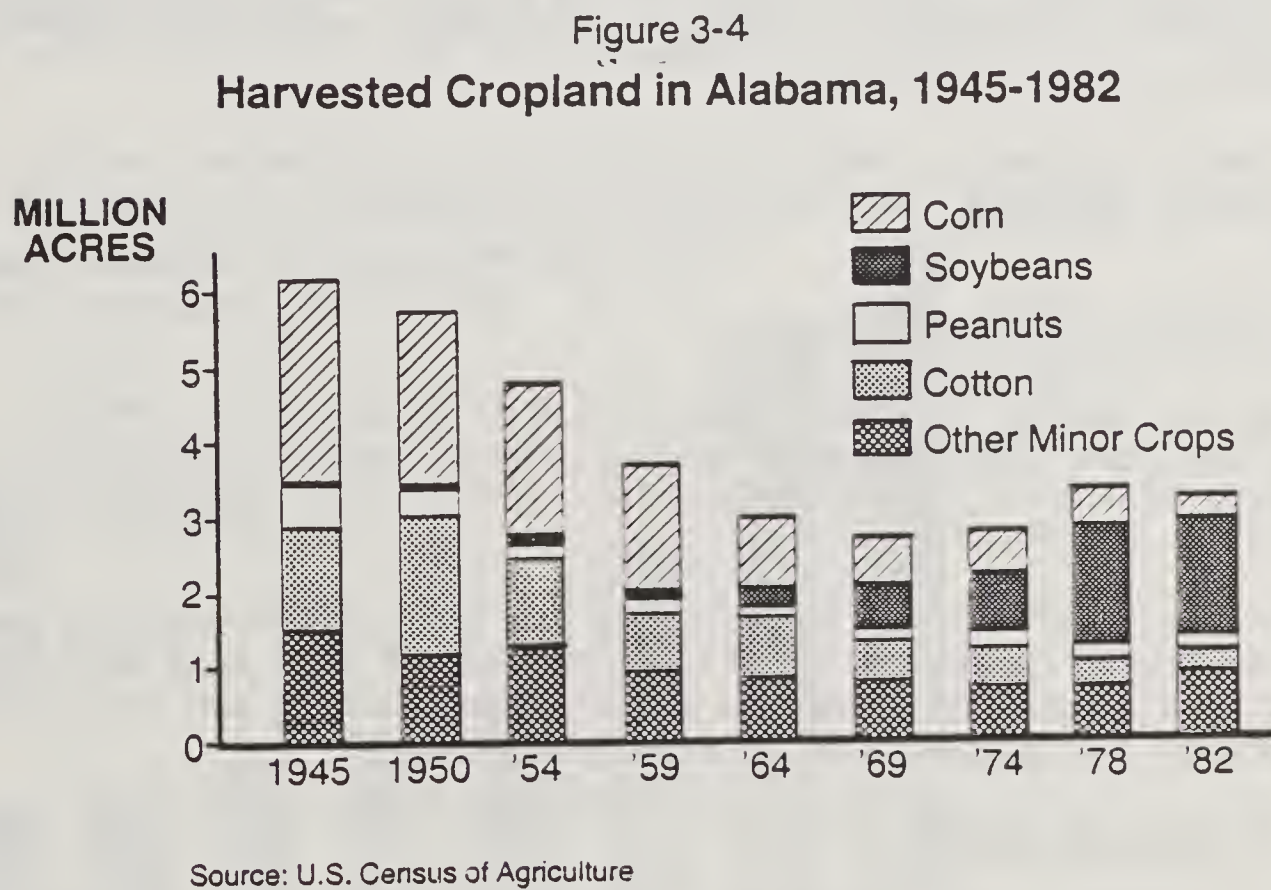
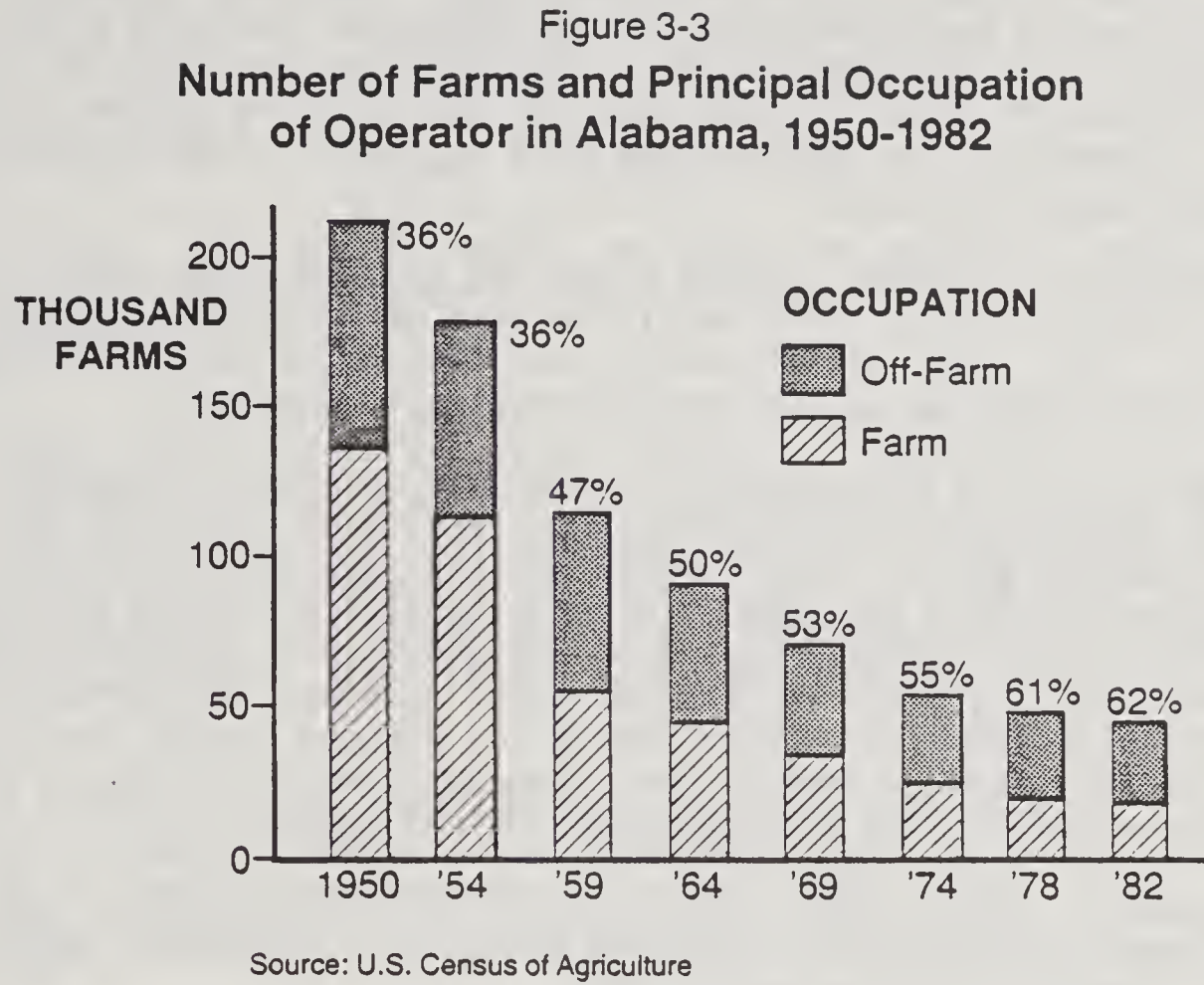
Source: U.S. Census of Agriculture

Figure 3-2  
Number of Farms By Size in Alabama, 1950-1982



Source: U.S. Census of Agriculture





Cotton and corn acreage decreased dramatically during this period. Cotton acreage fell from 1,850,000 acres to 790,000 acres during the decade of the 1950's alone. Cotton continued to decline through the '60's and '70's and by 1982, was grown on slightly less than 300,000 acres in Alabama. Corn harvested for grain experienced a similar drop from 2,750,000 acres in 1945 to about 300,000 acres in 1982.

Peanut acreage in Alabama reached a peak of about 500,000 acres in 1945 then declined sharply through 1954 mainly because of government acreage reduction programs. Since 1954, peanut acreage has fluctuated around 200,000 acres. In 1982, 171,000 acres of peanuts were harvested in Alabama.

Since 1950, soybeans have emerged as the leading crop in Alabama. In 1950, less than 50,000 acres were planted. By 1964, they had risen at a modest rate to about 200,000 acres. After 1964, soybeans advanced rapidly, peaking at 2.2 million acres in 1979 and 1980. In 1982, about 1.6 million acres were harvested. Unlike cotton and peanuts, which are grown only in certain areas of the state, soybeans are truly a statewide crop. Storage and marketing facilities have been established throughout the state. Strong demand for soybeans from foreign markets coupled with Alabama's ready access to shipping terminals have partly accounted for the acreage expansion statewide.

Hay has been a fairly steady enterprise in Alabama since World War II. Acreage of hay ranged from 400,000 to 500,000 throughout the period 1945-1974, then climbed to about 650,000 acres by 1982.

Wheat harvested for grain has increased during the past few years. Most wheat is grown in combination with other crops, principally soybeans on a double-crop basis. Wheat acreage varied between 35,000 and 120,000 acres from 1958 to 1978, then suddenly climbed to 725,000 acres in 1982 as the practice of double-cropping increased.

The acreage devoted to specialty crops such as vegetables, melons, and orchards has remained fairly steady, occupying about 100,000 acres over the past 25 years.

#### Pasture and Forest Changes

Pastureland acreage in Alabama has varied inversely with cropland acreage during the past three decades, ranging from a low of 3.1 million acres in 1958 to a high of 4.1 million acres in 1977. The 1982 NRI estimated pastureland at 3.8 million acres.

Forest land is by far the largest land use in Alabama occupying over 20 million acres or nearly two-thirds of all the nonfederal land area in the state. Forest land acreage has remained almost steady during the last 25 years, ranging between 19.8 million and 20.8 million acres.

#### Increase in Income

Alabama farmers reported a record \$2.2 billion from crop and livestock receipts in 1982, an increase of more than \$1 billion in ten years (Figure 3-5). However, when adjusted for inflation over the 1972 to 1982 period, the real increase in agricultural sales was less than \$200,000. Even so, the total

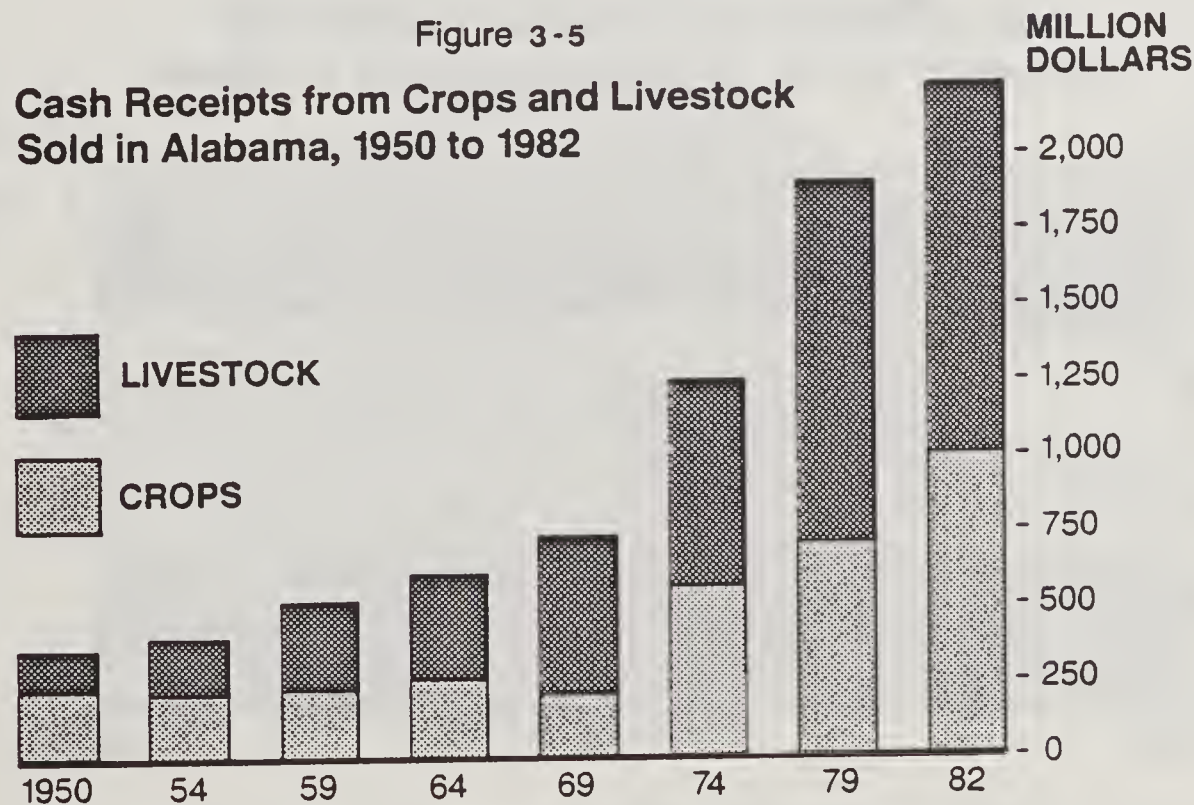


of \$2.2 billion represents a significant contribution to Alabama's gross state product or total economic activity. Sale of agricultural commodities stimulated an additional \$3.3 billion in related activities for a total agricultural contribution of \$5.5 billion to the state's economy. This represented 13 percent of Alabama's gross state product. Stated another way, 13 percent of Alabama's economic activity in 1982 was directly related to agriculture. This is evident in Figure 3-6, which relates agricultural income to income from other major industries. Crop and livestock receipts far exceeded revenue from other natural resources, as well as total tax collections, and all building construction in Alabama in 1982.

Poultry production is the leading cash agricultural enterprise in Alabama accounting for almost one-third of all farm receipts in 1982 (Figure 3-7). The sale of poultry and poultry products (\$670 million) exceeded the combined total of receipts from cattle and calves (\$351 million) and sale of soybeans (\$285 million), the second and third ranked enterprises. Sale of livestock and livestock products accounted for 56 percent of all cash farm receipts, while crop sales totaled 44 percent. This relationship has changed little in the past 20 years.

Alabama's average value of sales per farm reached \$35,000 in 1982, well below the U. S. average of \$60,000 (Figure 3-8). Alabama farmers steadily narrowed the gap between U. S. and Alabama average sales from 1950 through 1978; however, in the past five years, U. S. average sales have accelerated slightly faster than Alabama's.

Timber sales at the initial processing point totaled \$498 million in 1982 (Figure 3-9). Estimates of timber industry multipliers vary, but economic activity related to timber sales and processing stimulates another \$2 to \$5 billion to Alabama's economy. Together, forestry and agriculture account for at least 20 to 25 percent of the state's economic activity.

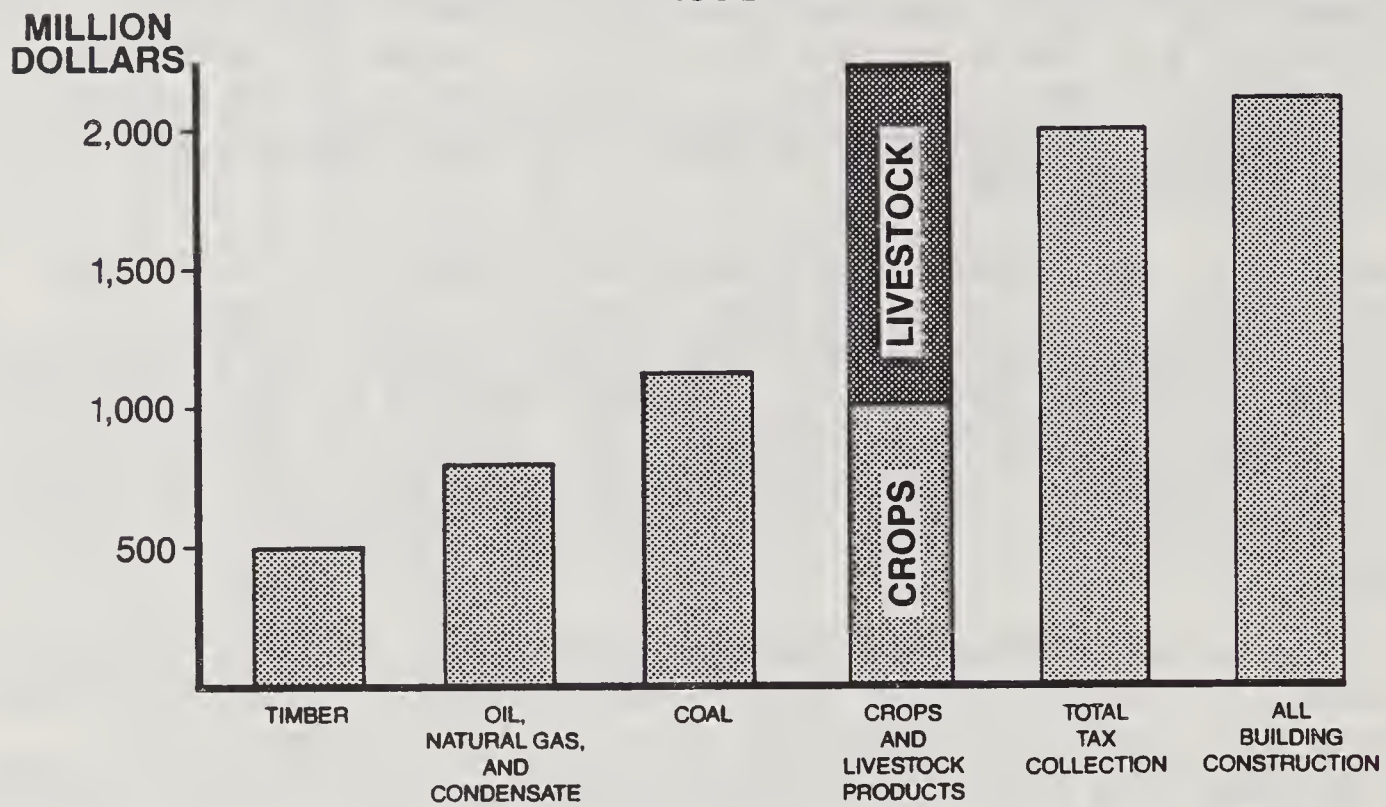


Source: U.S. Census of Agriculture



Figure 3-6

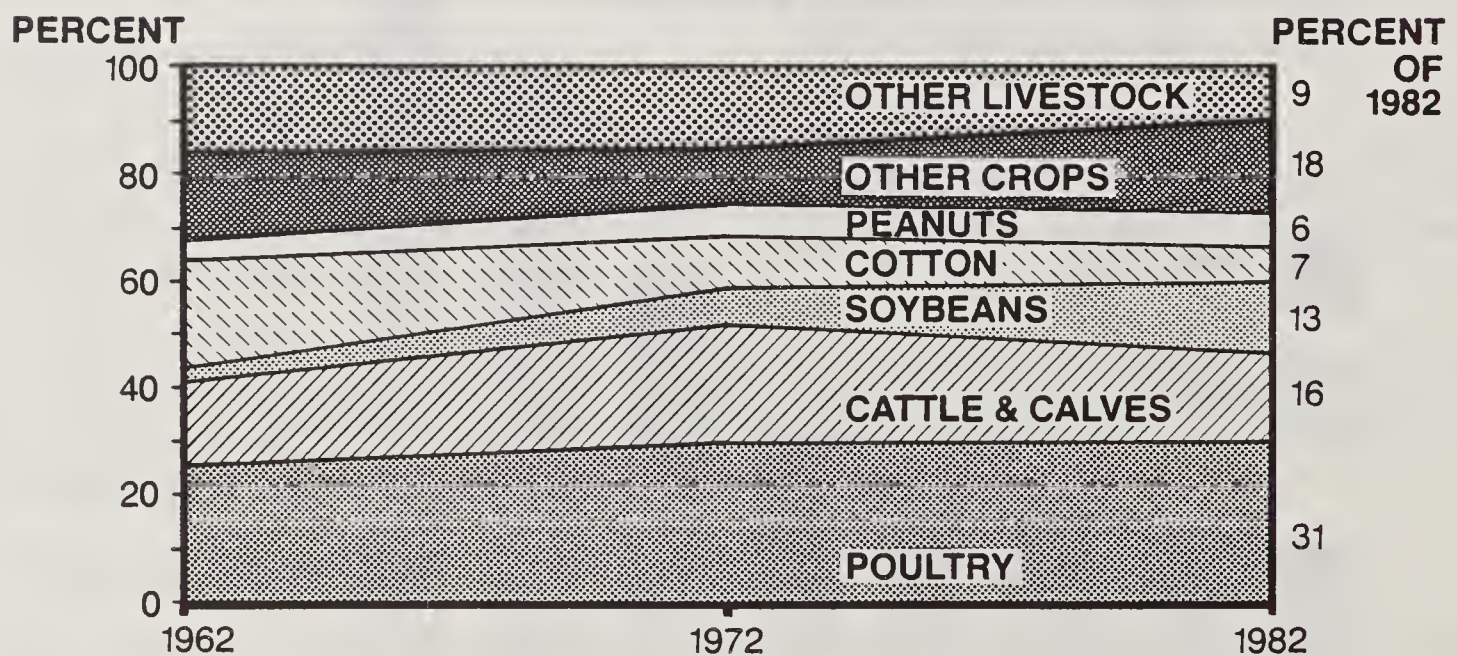
**Value of Agricultural Receipts in Comparison to Selected Economic Activities and Natural Resources Produced in Alabama, 1982**



Source: Alabama Crop and Livestock Reporting Service, Alabama Cooperative Extension Service, Alabama Geological Survey, and Department of Revenue

Figure 3-7

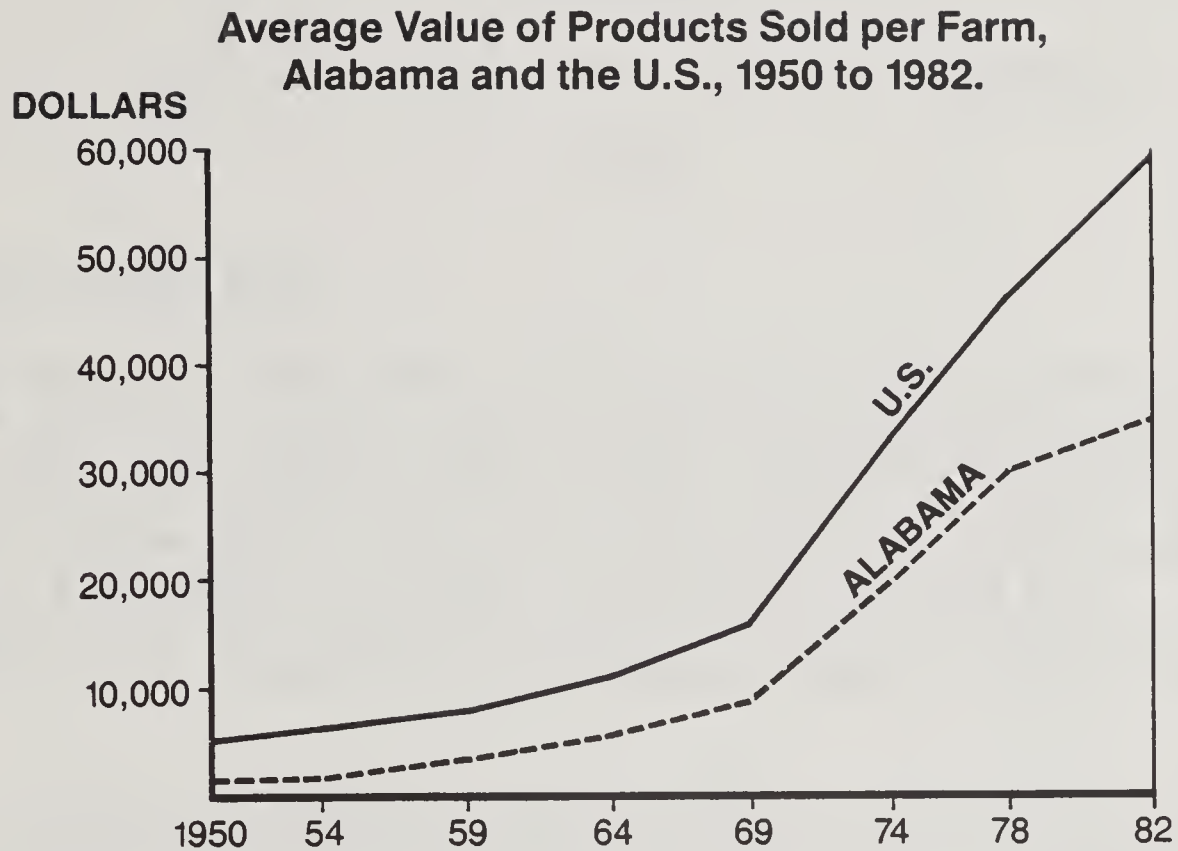
**Source of Crop and Livestock Receipts, by Commodity Group, 1962, 1972 and 1982, Alabama**



Source: Alabama Crop and Livestock Reporting Service



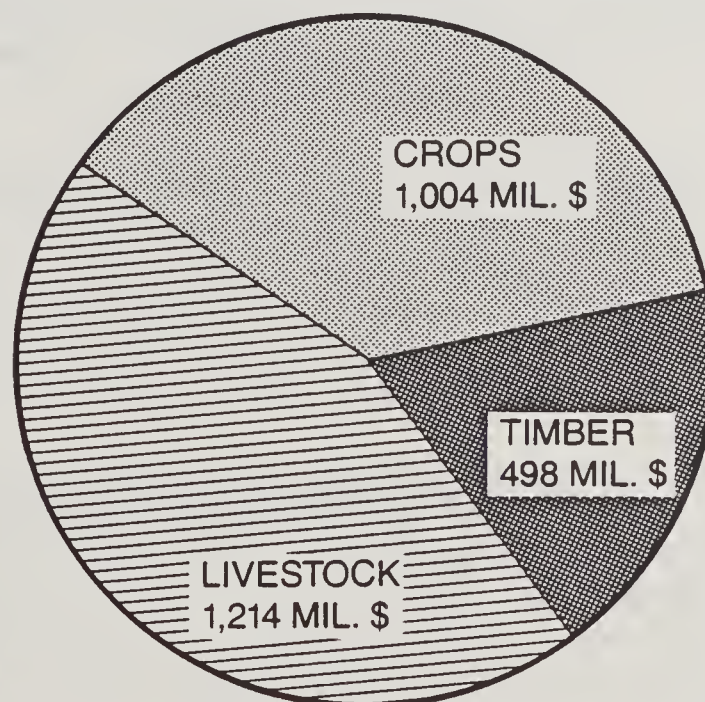
Figure 3-8



Source: U.S. Census of Agriculture

Figure 3-9

**Share of 1982 Cash Receipts From  
Agriculture and Forestry in Alabama**



Source: U.S. Census of Agriculture and Alabama Cooperative Extension Service



## CHAPTER 4

### DESCRIPTION OF LAND AND WATER RESOURCES

#### LAND

##### MAJOR LAND RESOURCE AREAS

Major Land Resource Areas (MLRA's) are geographic areas characterized by a particular pattern of soils, climate, elevation, topography, water resources, and land uses. Land resource areas normally coincide with general soil map units and physiographic areas, but the inclusion of land use patterns make them useful nationally in delineating agricultural characteristics. There are portions of eight MLRA's in Alabama (Table 4-1 and Figure 4-1). The 1982 NRI was designed to be statistically reliable at the MLRA level within the state. MLRA tables are available for most inventoried items. MLRA's are described below:

MLRA 122 - Highland Rim and Pennyroyal. Named for the area in Tennessee, Kentucky, and Indiana where the area is high land surrounding the Nashville Basin; only a relatively small portion of the MLRA lies in Alabama. The area is characterized by small to medium sized farms. The topography is predominantly gently rolling to strongly rolling with some broad upland flats and shallow basins. Soils are deep, cherty, and strongly acid with clayey subsoils.

Cropland erosion in this MLRA is the most severe in the state because of the combination of high erosion potential and extensive cropping. The rolling topography and relatively good soils are conducive to row crop agriculture, but the clayey soils and complex slopes make conservation systems difficult to manage.

MLRA 125 - Cumberland Plateau and Mountains. A highly dissected landscape of long forested side slopes and plateaus. More than 80 percent of the area is mixed hardwood forests. The agricultural soils, on the plateaus and ridges, are basically loamy over sandstone and shale.

Cropland erosion is severe because of the steep slopes, and soils are easily damaged by erosion. The pattern of small land holdings has resulted in the steep, delicate lands being cropped more intensively than they should be for sustained production. Because of the small size of the area in Alabama and the statistical design of the inventory, data is included with Sand Mountain (MLRA 129), an area of similar soils and climate.

MLRA 128 - Southern Appalachian Ridges and Valleys. An area of small and medium sized farms and mixed hardwood forests. Cotton, corn, and soybeans are important throughout the area. The landscape consists of many parallel ridges and intervening valleys. The western portion of the MLRA in Alabama is outside the Ridge and Valley Physiographic Province but is included because the major agricultural soils are deep, well-drained, and clayey over limestone.



Table 4-1  
Major Land Resource Areas

MLRA	Name	Approximate Acres
122	Highland Rim and Pennyroyal	502,900
125 <u>1/</u>	Cumberland Plateau and Mountains	183,800
128	Southern Appalachian Ridges and Valleys	4,191,200
129	Sand Mountain	4,578,700
133A	Southern Coastal Plain	17,906,400
135	Alabama, Mississippi, and Arkansas Blackland Prairie	2,130,300
136	Southern Piedmont	3,072,800
152A <u>2/</u>	Eastern Gulf Coast Flatwoods	525,000
State Total		33,091,100

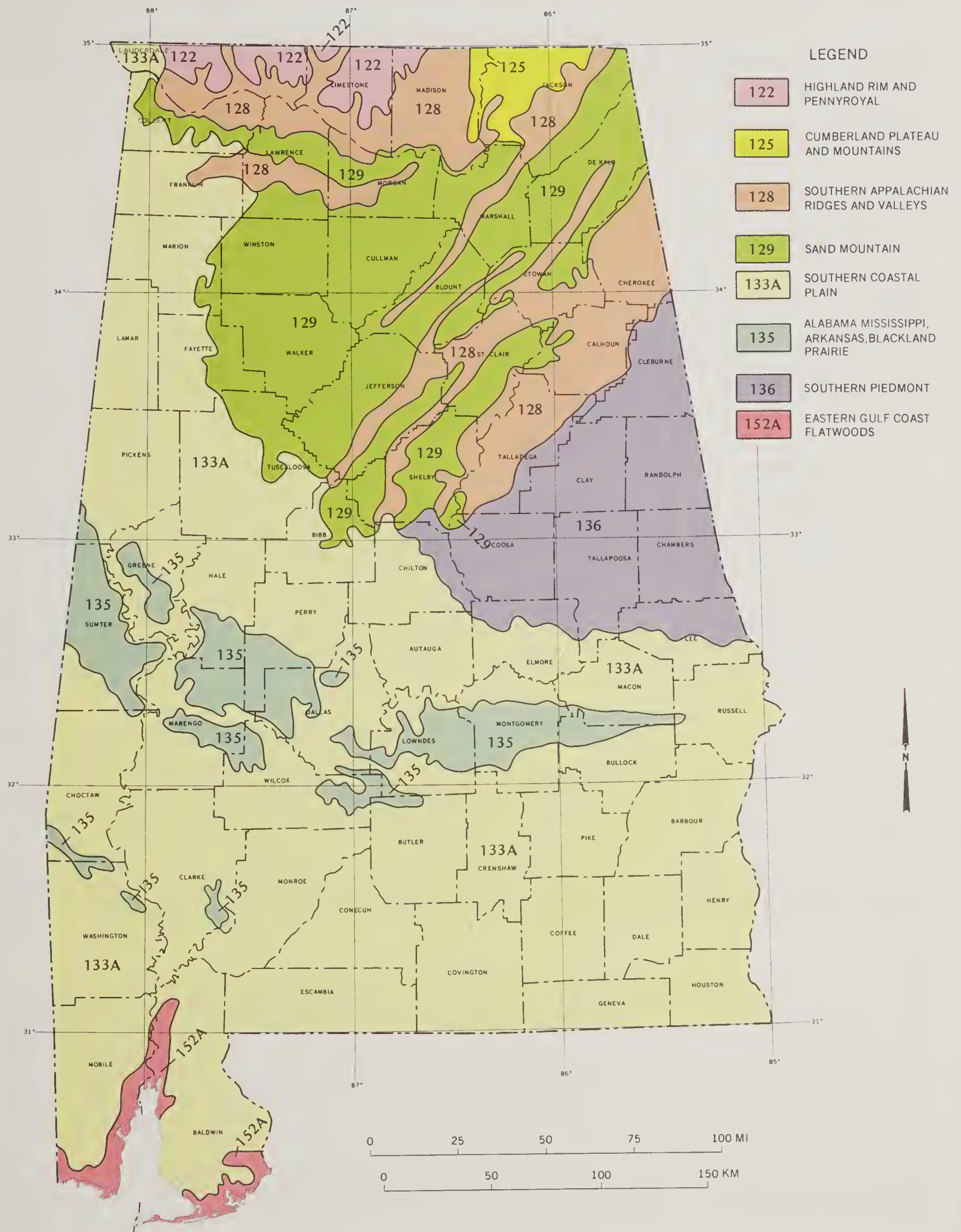
1/ Data for MLRA 125 is combined with data for MLRA 129 in subsequent tables

2/ Data for MLRA 152A is combined with data for MLRA 133A in subsequent tables

Source: 1982 NRI

# ALABAMA

## MAJOR LAND RESOURCE AREAS



Source:  
Land Resource Regions and  
Major Land Resource Areas  
of the U. S. USDA - SCS  
December 1981

REVISED APRIL 1985 4-R-34416



High erosion potential and extensive cropping makes the area subject to severe erosion. The ridge and valley topography makes conservation systems hard to install and manage.

MLRA 129 - Sand Mountain. The northern section is predominately rolling land cut by deep valleys, with small farms and less than half forested. To the southwest, the area becomes somewhat rougher and more forested. Overall in Alabama, the MLRA is 63 percent forested. Coal mining is important throughout. Soils are loamy to clayey over sandstone and shale.

Sheet and rill erosion on cultivated cropland is severe. The relatively shallow depth to rock causes the soils to have low tolerance to erosion damage and their productive capacity is quickly reduced by uncontrolled erosion.

MLRA 133A - Southern Coastal Plain. The area is about 70 percent forested and timber production is important. Field crops include soybeans, corn, peanuts, and cotton. Major vegetable crops, melons, and pecans are important in parts of the MLRA. The area is strongly dissected into nearly level valleys and gently sloping to steep uplands. Local relief is normally less than 100 feet. The underlying geologic materials are sedimentary, mostly unconsolidated sands, silts, and clays. The soils are deep with loamy or sandy surface layers and loamy or clayey subsoils.

Soils in the Coastal Plain are slightly less erodible than the clayey soils in the northern part of the state; however, the effect of soil properties are more than offset by other factors contributing to erosion. For example, rainfall energy during the cropping season is about twice as great in the southern counties as it is in the northeast corner of the state. Other climatic factors that cause severe erosion include warm winters with unfrozen ground and hot summers causing organic matter to be oxidized very rapidly. The surface layer of these soils is essentially structureless or nonaggregated, consequently, the individual grains erode more easily than if they were aggregated.

Gully erosion is very severe in parts of the area. Rainfall and other climatic factors play a part in the severity of gullying, but the major factors are local relief and unconsolidated geologic materials beneath the soil. Erosion damage by gullies results in loss of productive land and destruction of costly fixed improvements.

In Alabama, MLRA 133A is separated into two parts by MLRA 135. The area north of MLRA 135 is commonly called the "Upper Coastal Plain", and the "Lower Coastal Plain" is that area south of MLRA 135.

MLRA 135 - Alabama, Mississippi, and Arkansas Blackland Prairie. This is generally called the "Blackbelt" in Alabama. The local name is derived from the MLRA's position across the mid-section of the state in a band or "belt" of dark soils which are nearly black when moist. The area was originally prairie (grassland) with less extensive natural forests than the rest of the state. Soybeans are the major crop with corn, small grain, and cotton of lesser importance. Pasture is used extensively for beef production. The area is typically gently rolling but has some strongly rolling to steep areas. The clayey soils shrink, swell, and crack extensively upon wetting and drying because of the type of clay they contain. Most of the soils are deep or moderately deep over calcareous clay, marl, chalk, or soft limestone.



Sheet and rill erosion on cropland in MLRA 135 is potentially very severe and destructive. Soils in the area were severely depleted during the 1920's, but have been largely rehabilitated in recent years under pasture grasses. A new cycle of damage is underway as a result of the increase in soybean acreage in the area.

MLRA 136 - Southern Piedmont. Predominately a forested area with small farms. Most of the open land is utilized for pasture. The area is characterized by gently rolling topography interspersed with steep hilly areas. Toward the north, the topography becomes rougher with some mountainous portions of the area having local relief of about 1,000 feet. Soils have mostly clayey or loamy subsoils. Most of the original surface layer has eroded away. The underlying geologic materials are of diverse mineralogy, mostly metamorphic, crystalline rocks.

Soils of the Piedmont have average erodibility, but erosion on the steep slopes and a long history of clean-tilled cropping have left the soils severely depleted. Most of the area has very little original topsoil, and the subsoil remaining is not as productive as the original soil.

MLRA 152A - Eastern Gulf Coast Flatwoods. Typically 90 percent forested, but in Alabama about 30 percent of the area is farmed. Corn and soybeans are the major crops with fruits, vegetables, pecans, and horticulture contributing significantly to agricultural income. The area is nearly level to gently rolling. Soils are sandy and many are poorly drained. Extremely high rainfall during the cropping season causes serious erosion where the land is unprotected.

Because of the small size of the area and its relatively high percentage of cropland which is not typical of the MLRA as a whole, data for this area has been included with the Southern Coastal Plain (MLRA 133A).

#### GENERAL SOILS, LAND CAPABILITY CLASSES AND SUBCLASSES

Soils are grouped by land capability for purposes of understanding the land resource and for planning of conservation measures (Figure 4-2). In this classification, a field or part of a field is recognized by its degree of limitation for crop and pasture production ranging from Class I (least limitation) to Class VIII (most limited). The dominant limiting factor, such as erosion hazard (e), wetness (w), or root zone limitation (s), is specified by a subclass designation (Land Capability Classification, Agriculture Handbook No. 210, USDA-SCS, 1961).

In the land capability system, soil bodies are grouped with others, not necessarily geographically associated, but with similar management limitations and problems. This allows fields to be classified according to the land treatment needed for continued productivity. The system is helpful in measuring the quantity and productive quality of our lands and in projecting production possibilities (see also discussion of erosion effects on long-term productivity, Chapter 5).

Soils are also classified according to their physical and chemical characteristics. The map units published in county soil surveys generally are too detailed for broad area portrayal and are grouped as shown on the General Soil

Map of Alabama, Figure 4-3. Delineations represent large areas of soils common to whole communities. Though there are different soils within the delineations, they are closely associated and are in characteristic locations within the landscape. These soil associations are further grouped into seven soil provinces, closely related to the geologic nature of the materials in which the soils formed.

LAND USE

Alabama is the 29th largest state in the U.S., with 33,091,100 acres. This total includes 633,300 acres of large water bodies, and 904,400 acres of federal land (Table 4-2). Most of the inventory (NRI) is concerned with the 31,553,400 acres of nonfederal land, particularly the 29,696,600 acres of nonfederal rural land, including 179,900 acres of small built-up (Table 4-3 and 4-4).

Nonfederal rural land makes up 90 percent of the state. Nearly seventy percent of the nonfederal rural land is in forests, 15 percent in crops, and 13 percent in pasture. This land use distribution has changed little in recent years.

Capability distribution of Alabama's nonfederal rural land use is shown in Figure 4-4. Appendix B contains data on federal land and census water by counties, and cropland use by land capability class for each MLRA.

GENERAL OWNERSHIP CHARACTERISTICS

Rural land in Alabama is approximately 99 percent privately owned. The small amount of land held by public entities is mostly state and national forests and coastal area.

With respect to the use of the state's agricultural and forest lands, private ownership is generally responsive to supply and demand. The statewide increase in soybean acreage, and the reforestation of the severely eroded Piedmont (MLRA 136) are examples of the responsiveness of private ownership. These changes were not legislated or mandated by national policy, but were brought about by market demands.

Ownership of the 29.5 million acres of nonfederal rural land in Alabama (cropland, pastureland, forest land, and minor use) is:

<u>PUBLIC</u>	<u>PRIVATE</u>		
	<u>CORPORATE</u>	<u>INDIVIDUAL</u>	<u>UNCLASSIFIED</u>
1.2%	17.7%	80.9%	0.2%

In the 1982 NRI, private land was characterized as corporately-owned if the known ownership was a business other than a family farming company (even if the farm business is incorporated). This was done to identify areas where land management and conservation decisions are made at the corporate level.



FIGURE 4-2  
LAND CAPABILITY CLASSIFICATION



*Class I soils have few limitations that restrict their use. Class II soils have moderate limitations that reduce the choice of plants or that require moderate conservation practices. Class III soils have severe limitations that reduce the choice of plants, require special conservation practices, or both. Class IV soils*

*have very severe limitations that reduce the choice of plants, require very careful management, or both. Class V soils are not likely to erode but have other limitations, impractical to remove, that limit their use largely to pasture or range woodland, or wildlife.*

*Class VI soils have severe limitations that make them generally unsuitable for cultivation and limit their use largely to pasture or range woodland, or wildlife. Class VII soils have very severe limitations that make them unsuitable for cultivation and that restrict their use largely to pasture or range, wood-*

*land, or wildlife. Class VIII soils and landforms have limitations that preclude their use for commercial crop production and restrict their use to recreation, wildlife, or water supply, or to esthetic purposes.*

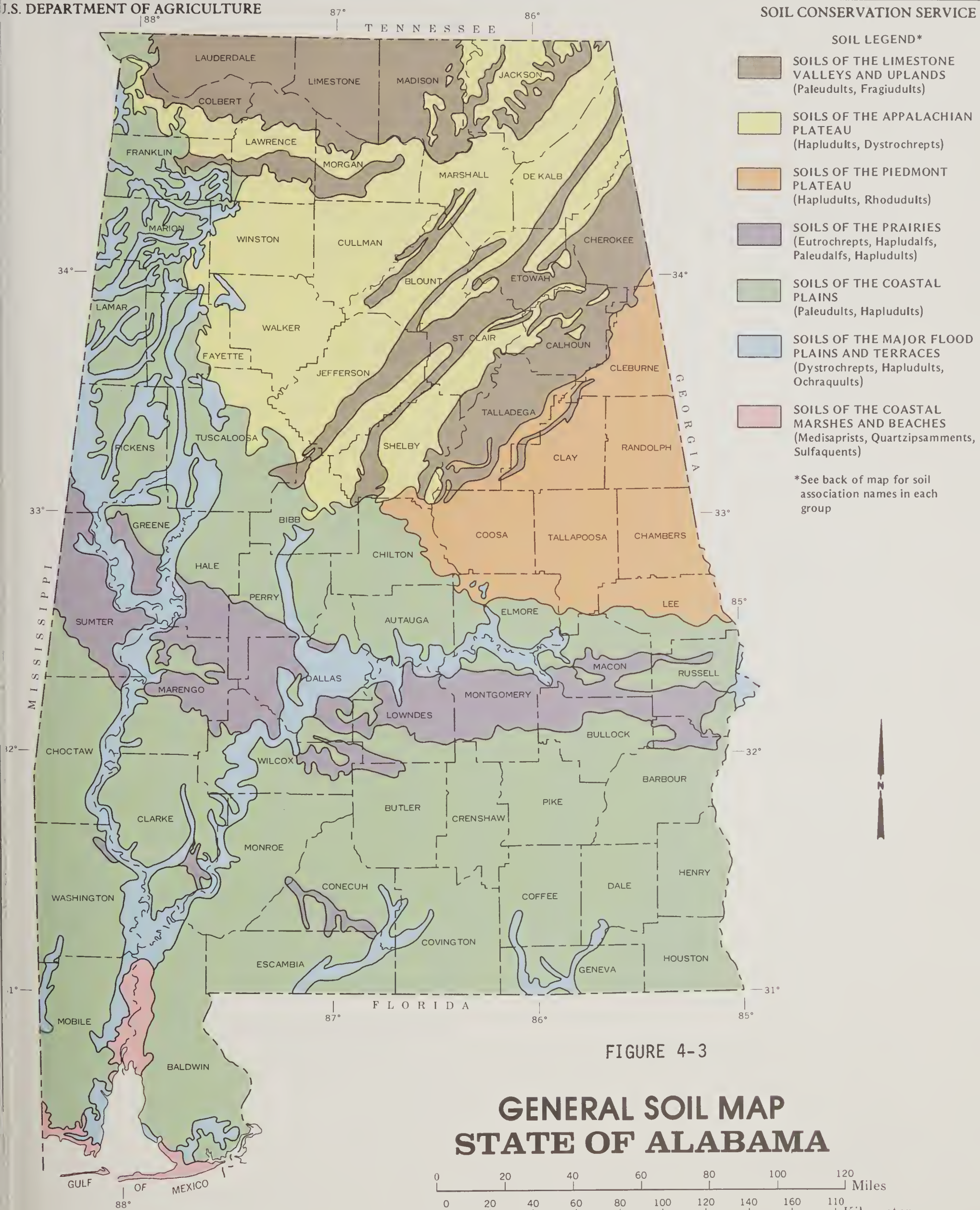
SOURCE: Agriculture Handbook 210.



**SURFACE AREA AND USE OF LAND AND WATER BY MLRA. 1982**

✓ INCLUDES SMALL BUILT-UP

24



SOURCE: General soil map of  
Alabama No. 4-R-33619  
published January 1984

## SOIL LEGEND

### SOILS OF THE LIMESTONE VALLEYS AND UPLANDS (Paleudults, Fragiudults)

Barfield-Rockland, limestone  
 Cheaha-Leesburg  
 Colbert-Tupelo-Firestone  
 Conasauga-Firestone-Montevallo  
 Decatur-Dewey  
 Decatur-Dewey-Allen  
 Dickson-Fullerton  
 Holston-McQueen-Chewacla  
 Lobelville-Lee  
 Minvale-Bodine-Fullerton  
 Minvale-Fullerton

### SOILS OF THE APPALACHIAN PLATEAU (Hapludults, Dystrochrepts)

Hartsells-Nauvoo-Linker-Albertville  
 Hartsells-Rockland, limestone-Hector-Chisca  
 Hartsells-Wynntown-Albertville  
 Hector-Rockland, limestone-Allen  
 Montevallo-Townley-Nauvoo

### SOILS OF THE PIEDMONT PLATEAU (Hapludults, Rhodudults)

Appling-Cecil  
 Cecil-Grover-Madison  
 Davidson-Hiwassee-Gwinnett  
 Iredell-Mecklenburg  
 Gwinnett-Cecil-Appling  
 Madison-Louisa  
 Madison-Tallapoosa-Pacolet  
 Pacolet-Gwinnett-Hiwassee  
 Tallapoosa-Tatum-Weogulka

### SOILS OF THE PRAIRIES (Eutrochrepts, Hapludalfs, Paleudalfs, Hapludults)

Demopolis-Sumter-Watsonia-Oktober  
 Sumter-Kipling-Sugarnoochee  
 Wilcox-Mayhew-Eutaw  
 Oktoberbeha-Conecuh-Luverne-Watsonia  
 Oktoberbeha-Cadeville-Saffell

### SOILS OF THE COASTAL PLAINS (Paleudults, Hapludults)

Dothan-Bonifay-Esto-Floral  
 Saffell-Smithdale-Rockland, limestone  
 Conecuh-Luverne-Halso  
 Malbis-Orangeburg-Pansey  
 McLaurin-Troup-Ruston  
 Dothan-Orangeburg-Luverne-Red Bay  
 Orangeburg-Red Bay-Dothan-Troup  
 Poarch-Benndale-Escambia  
 Lucedale-Malbis-Luverne-Bama  
 Arundel-Conecuh-Cantuchie  
 Blanton-Uchee-Marvyn  
 Smithdale-Luverne-Saffell  
 Smithdale-Luverne-Troup-Boswell  
 Smithdale-Troup-Lucedale-Luverne  
 Smithton-Escambia-Troup-Benndale  
 Troup-Alaga-Lucy  
 Luverne-Orangeburg-Conecuh-Lucy  
 Troup-Plummer-Escambia  
 Saffell-Gritney-Bama-Malbis  
 Troup-Orangeburg-Malbis-Escambia  
 Luverne-Smithdale-Escambia  
 Red Bay-Orangeburg  
 Luverne-Lucy-Nankin  
 Bama-Troup-Kipling

### SOILS OF THE MAJOR FLOOD PLAINS AND TERRACES (Dystrochrepts, Hapludults, Ochraqults)

Chrysler-Urbo-Cahaba  
 Bayou-Escambia-Harleston  
 Savannah-Bama-Mantachie

### SOILS OF THE COASTAL MARSHES AND BEACHES (Medisaprists, Quartzipsamments, Sulfaquents)

Dorovan-Johnson-Levy  
 Axis-Lafitte  
 Fripp-Osier-Beaches



Table 4-3

USE OF NONFEDERAL RURAL LAND.  
BY LAND CAPABILITY CLASS AND SUBCLASS, 1982

CLASS/ SUBCLASS	CROPLAND	PASTURELAND	FOREST LAND	MINOR USES <sup>1/</sup>	TOTAL
	-----1000 ACRES-----				
I	327.6	53.4	153.9	15.5	550.4
IIe	1606.6	814.5	1281.8	116.8	3819.7
IIe	88.0	25.5	88.7	7.0	209.2
IIw	534.1	394.7	966.1	14.1	1909.0
IIIe	787.2	802.4	1848.0	71.8	3509.4
IIIw	146.6	99.8	374.6	15.1	636.1
IIIs	259.7	102.6	484.0	18.3	864.6
IVe	239.4	512.8	2240.6	51.6	3044.4
IVs	88.6	85.3	548.9	2.2	725.0
IVw	216.5	220.7	985.2	22.7	1445.1
V	45.0	119.4	1777.7	19.7	1961.8
VIe	86.5	291.0	2024.3	30.6	2432.4
VIe	35.1	46.9	577.5	10.6	670.1
VIw			73.8	1.6	75.4
VIIe	33.0	151.0	4894.2	45.2	5123.4
VIIe	16.4	93.6	2155.8	72.8	2338.6
VIIw		3.0	144.7	29.3	177.0
VIII			13.5	11.6	25.1
N/A				179.9	179.9
STATE TOTAL	4510.3	3816.6	20633.3	736.4	29696.6

-----  
<sup>1/</sup> INCLUDES SMALL BUILT-UP

SOURCE: 1982 NRI

Table 4-4

## NON-FEDERAL RURAL LAND USE BY COUNTY, 1982 (ACRES)

COUNTY	CROPLAND	PASTURELAND	FORESTLAND	MINOR USES <u>1/</u>	TOTAL
AUTAUGA	64,300	48,900	231,200	20,100	364,500
BALDWIN	182,000	38,000	694,300	35,200	949,500
BARBOUR	94,200	70,700	369,300	4,200	538,400
BIBB	13,700	32,700	274,900	8,300	329,600
BLOUNT	56,600	75,800	239,100	12,800	384,300
BULLOCK	74,800	69,400	240,800	4,400	389,400
BUTLER	51,300	46,000	378,100	5,500	480,900
CALHOUN	49,700	20,800	199,400	8,000	277,900
CHAMBERS	12,600	52,300	294,900	2,900	362,700
CHEROKEE	69,900	35,300	223,400	9,000	337,600
CHILTON	32,400	59,000	298,400	10,900	400,700
CHOCTAW	20,200	27,100	500,600	6,000	553,900
CLARKE	18,900	20,000	714,700	12,500	766,100
CLAY	7,600	32,000	261,700	4,800	306,100
CLEBURNE	6,300	23,000	234,900	2,500	266,700
COFFEE	127,800	41,600	217,500	11,200	398,100
COLBERT	63,900	53,100	216,000	11,000	344,000
CONECUH	55,700	43,200	424,700	4,400	528,000
COOSA	4,000	13,700	387,400	3,400	408,500
COVINGTON	113,700	34,600	436,300	5,100	589,700
CRENSHAW	59,400	31,500	276,900	5,000	372,800
CULLMAN	82,600	123,100	225,900	15,400	447,000
DALE	86,600	26,200	180,200	6,400	299,400
DALLAS	156,200	108,400	324,400	3,400	592,400
DEKALB	82,200	91,400	277,900	11,900	463,400
ELMORE	62,300	33,400	242,500	27,500	365,700
ESCAMBIA	71,000	9,900	465,100	8,600	554,600
ETOWAH	44,300	44,900	200,500	10,400	300,100
FAYETTE	40,100	36,800	302,600	13,200	392,700
FRANKLIN	57,600	50,400	255,100	15,200	378,300
GENEVA	163,500	49,100	131,900	7,000	351,500
GREENE	45,300	86,000	246,200	2,200	379,700
HALE	81,500	79,600	210,000	2,900	374,000
HENRY	97,400	40,500	200,000	2,700	340,600
HOUSTON	143,200	90,600	97,700	7,200	338,700
JACKSON	138,500	80,300	427,500	16,000	662,300
JEFFERSON	12,800	34,100	449,400	36,100	532,400

Continued on next page

Table 4-4 (Continued)

NON-FEDERAL RURAL LAND USE BY COUNTY, 1982 (ACRES)

COUNTY	CROPLAND	PASTURELAND	FORESTLAND	MINOR USES <sup>1/</sup>	TOTAL
LAMAR	20,100	53,000	295,400	3,400	371,900
LAUDERDALE	137,400	99,300	140,700	11,400	388,800
LAWRENCE	141,700	64,500	115,900	14,800	336,900
LEE	36,300	70,200	246,100	9,200	361,800
LIMESTONE	176,000	46,000	91,200	5,900	319,100
LOWNDES	58,700	142,600	233,500	5,800	440,600
MACON	70,800	58,500	233,300	5,100	367,700
MADISON	185,100	67,800	170,400	10,800	434,100
MARENGO	73,100	113,100	411,600	6,300	604,100
MARION	48,700	25,000	359,700	16,300	449,700
MARSHALL	80,000	64,400	173,000	12,900	330,300
MOBILE	82,800	43,400	523,500	38,500	688,200
MONROE	72,000	31,000	522,100	5,400	630,500
MONTGOMERY	108,200	126,500	180,400	29,200	444,300
MORGAN	66,100	91,500	156,000	16,500	330,100
PERRY	98,600	68,800	243,900	1,800	413,100
PICKENS	46,600	22,800	460,900	8,500	538,800
PIKE	78,000	76,700	252,900	6,800	414,400
RANDOLPH	17,700	44,200	280,600	5,300	347,800
RUSSELL	59,200	46,100	258,500	2,100	365,900
ST CLAIR	13,600	45,000	281,900	34,000	374,500
SHELBY	29,200	39,000	393,000	8,000	469,200
SUMTER	71,200	116,800	354,500	11,500	554,000
TALLADEGA	34,200	121,900	230,500	7,800	394,400
TALLAPOOSA	17,700	36,600	364,300	5,600	424,200
TUSCALOOSA	41,400	43,200	683,700	21,400	789,700
WALKER	21,000	57,700	363,400	34,200	476,300
WASHINGTON	19,700	36,400	613,000	7,200	676,300
WILCOX	50,000	59,700	434,400	2,900	547,000
WINSTON	11,100	51,500	213,600	14,500	290,700
STATE TOTAL	4,510,300	3,816,600	20,633,300	736,400	29,696,600

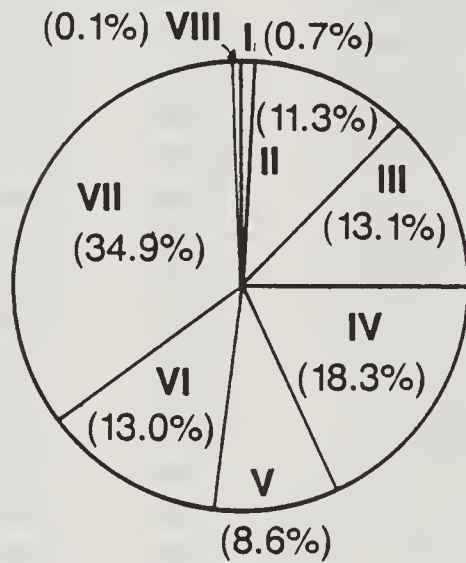
<sup>1/</sup> INCLUDES SMALL BUILT-UP

SOURCE: 1982 NRI

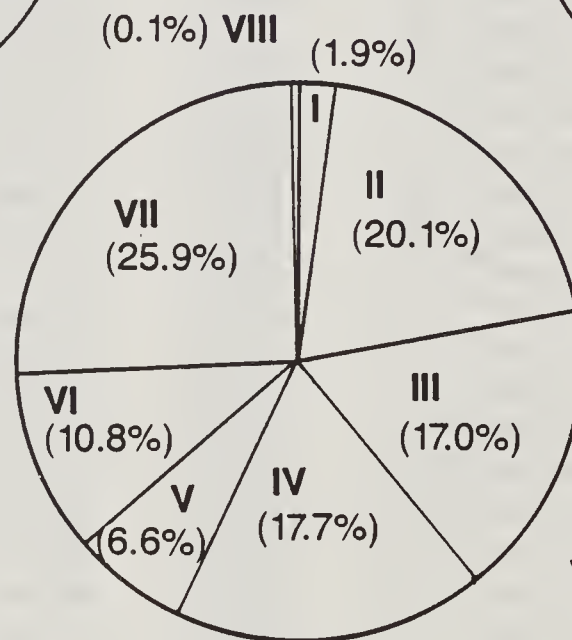
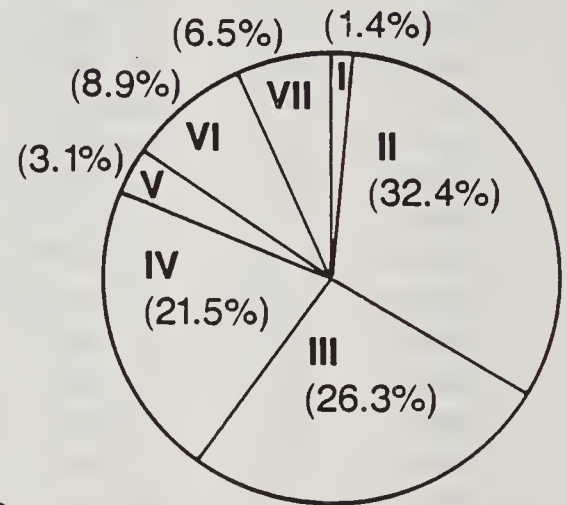


**FIGURE 4-4**  
**Distribution of Alabama's Nonfederal Rural Land,**  
**by Land Capability Class, 1982**

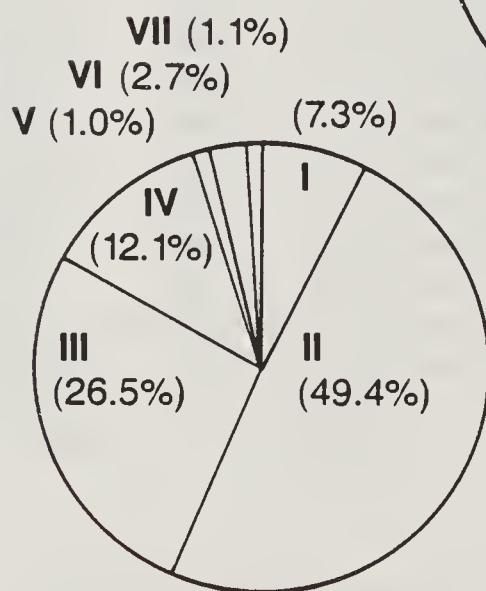
**Cropland (4,510,300 Acres)**



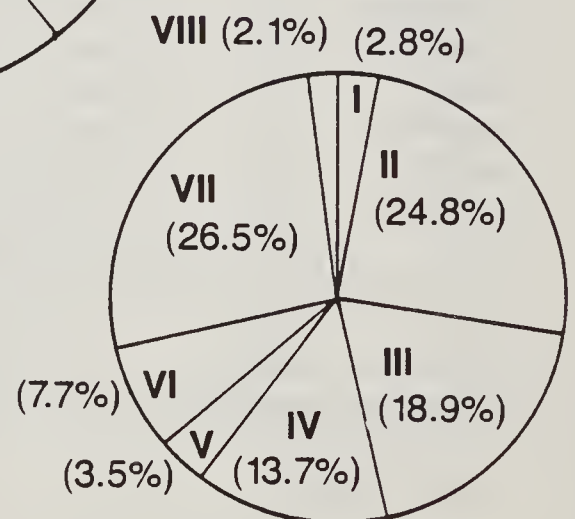
**Pastureland (3,816,600 Acres)**



**STATE TOTAL**  
**29,516,700 Acres**



**Forest Land (20,633,300 Acres)**



**Minor Uses (556,500 Acres)**

Source: 1982 NRI

Cropland and pastureland are about 3 percent corporately owned, while 24 percent of the forest land is corporately owned (Table 4-5). Most forest corporate ownership is by the "forest industry", including lumber, paper, and other forest-product companies. Tables of nonfederal rural land ownership for each MLRA are in Appendix B.

Analysis of the data in Table 4-6 presenting land ownership by MLRA indicates that the ownership pattern is not uniform statewide. Predictably, the areas that have steeply sloping terrain or rocky land are most heavily forested and have higher percentages of forest land corporately owned.

Table 4-5

OWNERSHIP OF NONFEDERAL RURAL LAND. BY LAND USE. 1982

LAND USE	CORPORATE	PRIVATE INDIVIDUAL	UNCLASSIFIED		PUBLIC	TOTAL
	-----1000 ACRES-----					
CROPLAND	140.30	4346.60			23.40	4510.30
PASTURE	94.80	3695.40			26.40	3816.60
FOREST	4893.20	15473.60			266.50	20633.30
MINOR USES	102.00	354.80	70.40		29.3	556.50
STATE TOTAL	5230.30	23870.40	70.40		345.60	29516.70

-----  
SOURCE: 1982 NRI

Table 4-6

OWNERSHIP OF NONFEDERAL RURAL LAND. BY MLRA. 1982

MLRA	CORPORATE	PRIVATE INDIVIDUAL	UNCLASSIFIED		PUBLIC	TOTAL
	-----1000 ACRES-----					
122	10.70	435.90	2.50		4.60	453.70
128	212.50	3132.10	13.20		36.30	3394.10
129/125	685.60	3434.10	12.80		49.60	4182.10
133A/152A	3739.80	12821.50	31.30		210.60	16803.20
135	219.80	1776.00	3.60		28.30	2027.70
136	361.90	2270.80	7.00		16.20	2655.90
STATE TOTAL	5230.30	23870.40	70.40		345.60	29516.70

-----  
SOURCE: 1982 NRI

## FARM OWNERSHIP

In 1950, over 40 percent of all farm operators were tenant farmers (Figure 4-5). Less than one-half of all operators owned their farm. Over the past 30 years, however, the situation has changed dramatically. The tenant farmer has almost disappeared, while full owners now control about 70 percent of all Alabama farms. While many full owners farm their land, an increasing number lease their farmland to others. In Alabama, large acreages are being farmed and managed by non-owner operators either on a cost-rent or crop-share arrangement.

In the last two decades, individuals and families have consistently controlled 80 percent of Alabama's farmland, with partnerships and corporations managing the balance (Figure 4-6). There has been a slight increase in the number of corporate-owned farms in relation to partnerships, but the corporate-partnership arrangement continues to play a minor role in Alabama agriculture.

## FOREST RESOURCES <sup>1/</sup>

### Forest Area by Ownership and Forest Types

Forest land acreage has increased by 100,000 acres since 1972. There are now 20,633,300 acres of nonfederal forest land in Alabama. Forest industry owns 22 percent of the forest land while other private corporations and individuals own 77 percent of the forest land. The remaining 1 percent is publicly owned. During the last 10 years, the amount of farmer-owned forest land has decreased by 850,000 acres.

About 7 million acres are in pine forest types, while over 4.2 million acres are in oak-pine. Almost 7 million acres are in upland hardwood types with almost 6 million acres occurring on non-industrial forest ownerships. Over 2.3 million acres are in bottomland hardwoods (Table 4-7).

### Forest Resource Region Description

Alabama's forest resources are subdivided into six resource regions (Figure 4-7 and Table 4-8). These individual resource regions generally coincide with the Major Land Resource Areas in the state. Also, the grouping tends to follow the climatic patterns that exist across the state.

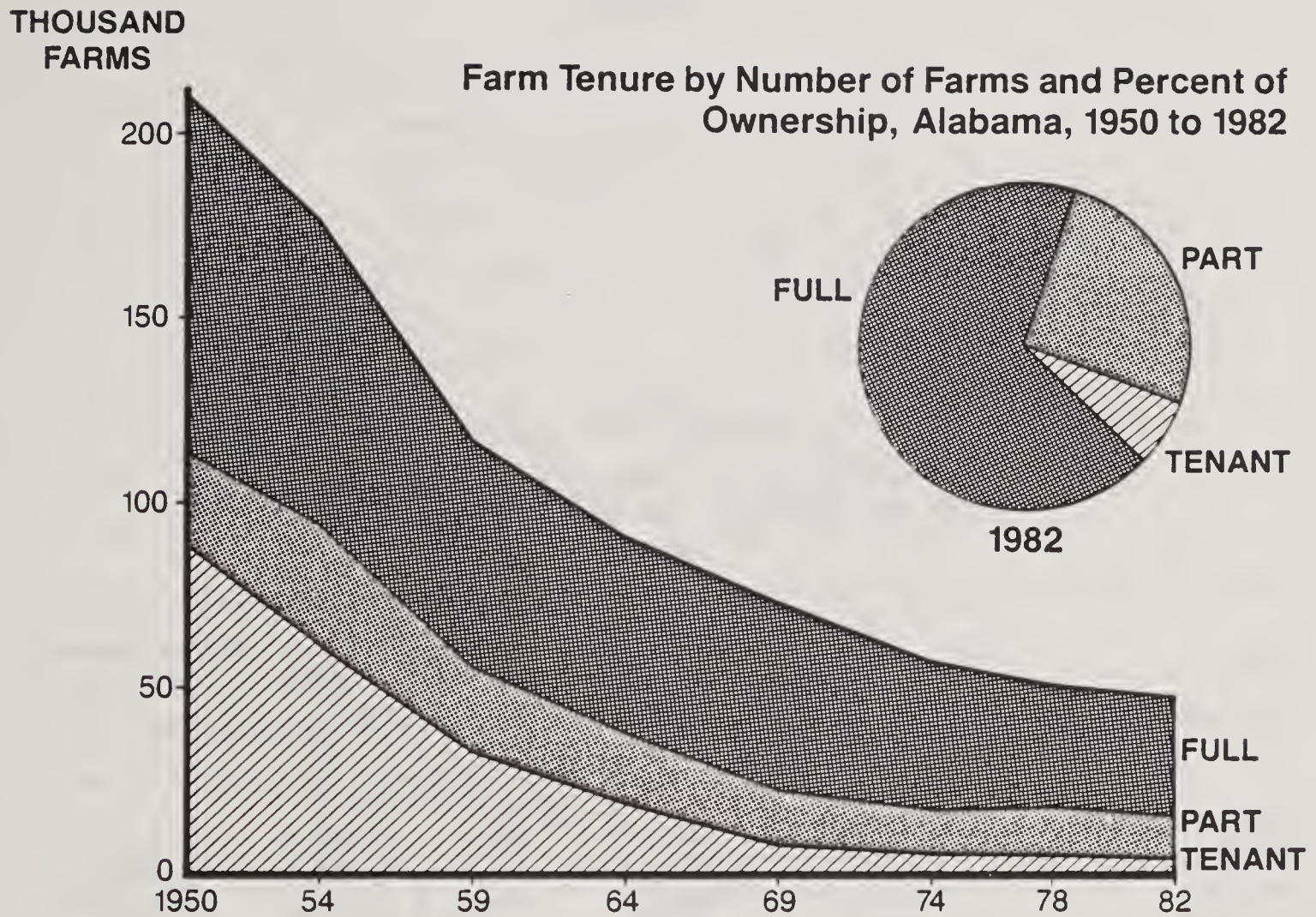
The Southwest-South region is comprised predominantly of the Coastal Plain MLRA with a small amount of Gulf Coast Flatwoods. The predominant timber types are longleaf-slash pine (36 percent) and oak-pine (22 percent) with the remainder in oak-gum-cypress (17 percent), oak-hickory (14 percent), and loblolly-shortleaf pine (10 percent).

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<sup>1/</sup> Some of the information in this section is adapted from Forest Resources of Alabama, by Rudis, Rosson and Kelly.



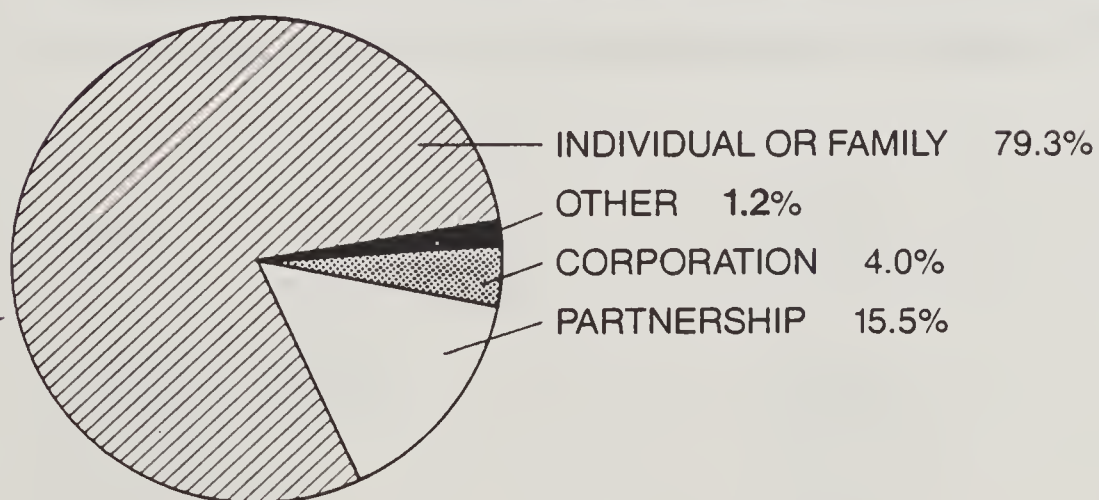
Figure 4-5



Source: U.S. Census of Agriculture

Figure 4-6

**Land In Farms by Type of Organization, Alabama, 1982**



Source: U.S. Census of Agriculture

Table 4-7  
Area of Nonfederal Forest Land by Forest  
Types and Ownership Classes, Alabama, 1982

Type	All Ownerships	Forest Industry	Public	Farmer	Miscellaneous Private
-----1000-Acres-----					
Longleaf-Slash	1,377.6	549.9	28.7	180.8	618.2
Loblolly-Shortleaf	5,614.5	1,522.1	35.2	1,298.6	2,758.6
Oak-Pine	4,276.2	921.2	60.1	1,149.2	2,145.7
Oak-Hickory	6,987.3	983.5	68.0	2,312.3	3,623.5
Oak-Gum-Cypress	2,273.3	447.9	17.2	860.2	948.0
Elm-Ash-Cottonwood	68.2	5.3		51.9	11.0
Nontyped <u>1/</u>	36.2	12.0		6.0	18.2
All Types	20,633.3	4,441.9	209.2	5,859.0	10,123.2

1/ No live trees 1.0 inches diameter or larger at breast height

Source: USDA Forest Service, Alabama Forest Survey, 1982

FIGURE 4-7

Forest Resource Regions in Alabama

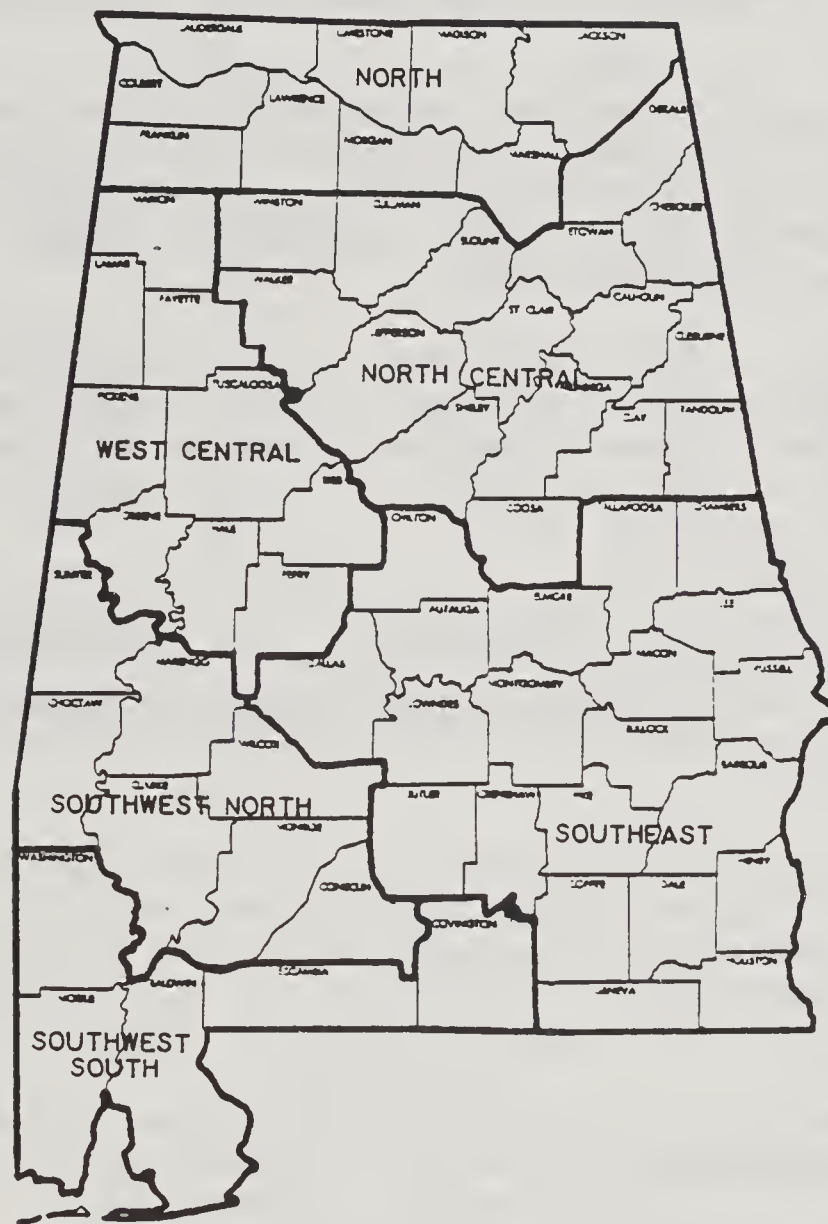


Table 4-8

Nonfederal Forest Area by Forest Resource Region

<u>Region</u>	<u>1982</u> (1000 acres)
Southwest-South	2,732.2
Southwest-North	3,362.6
Southeast	5,252.8
West-Central	3,077.3
North-Central	4,184.7
North	<u>2,023.7</u>
	20,633.3

Source: 1982 NRI



The Southwest-North Region is comprised primarily of the Coastal Plain MLRA and a portion of the Blackland Prairie MLRA. The predominant timber types are loblolly-shortleaf pine (33 percent), oak-hickory (26 percent) and oak-pine (22 percent) with the remainder in oak-gum-cypress (16 percent), and longleaf-slash pine (3 percent).

The Southeast Region is comprised predominantly of the Coastal Plain with about a third of the area in Piedmont and Blackland Prairie MLRA's. The primary timber types are oak-hickory (34 percent), loblolly-shortleaf pine (32 percent) and oak-pine (20 percent), with the remainder in oak-gum-cypress (11 percent) and longleaf-slash pine (3 percent).

The West-Central Region consists of the Coastal Plain MLRA with about one-fifth the area in the Sand Mountain MLRA and a lesser amount in the Blackland Prairie MLRA. The predominant timber types are oak-hickory (31 percent), loblolly-shortleaf pine (30 percent), and oak-pine (23 percent), with the remainder in oak-gum-cypress (15 percent).

The North-Central Region is comprised about equally between the Piedmont, the Sand Mountain, and Ridge and Valley MLRA's. The predominant timber types are oak-hickory (42 percent), loblolly-shortleaf pine (31 percent), and oak-pine (21 percent), with the remainder in oak-gum-cypress (3 percent) and longleaf-slash pine (2 percent).

About one-half of the North Region is in the Sand Mountain MLRA, about one-fourth in the Ridge and Valley MLRA and the remaining one-fourth about equally divided between the Cumberland Plateau and the Highland Rim MLRA's. The predominant timber type is oak-hickory (62 percent) with the remainder in loblolly-shortleaf pine (18 percent), oak-pine (15 percent), and oak-gum-cypress (5 percent).

#### Growing-Stock Volumes

The volume of growing-stock inventory continues to be dominated by softwoods, although by a somewhat smaller margin than in 1972. Softwoods now account for 53 percent of the 20.5 billion cubic feet of growing-stock. In 1972, softwoods accounted for 55 percent of the 19.3 billion cubic feet in growing-stock inventory (Tables 4-9 and 4-10).

Hardwoods are increasing at a faster rate than softwoods. While the hardwood inventory increased about 1.0 billion cubic feet between 1972 and 1982, softwoods increased only about 0.2 billion cubic feet. The 1.2 billion cubic feet increase in growing-stock inventory since 1972 has not been uniformly distributed across the state. Most of the increase has occurred in the northern part of the state where the timber inventory increased 15 percent. In contrast, the three southern forest resource areas show a slight decrease in total growing-stock inventory. Softwood growing-stock inventory in the southern units has decreased about 4 percent.

Table 4-9  
Growing-Stock Volume on Nonfederal Forest Land, 1982  
and Percent Change Since 1972

Region	All Species		Softwood		Hardwood	
	Million Cubic Feet	Percent Change	Million Cubic Feet	Percent Change	Million Cubic Feet	Percent Change
Southwest-South	2,479.1	-2.3	1,571.2	-4.9	907.9	2.5
Southwest-North	3,871.3	-0.7	2,205.2	-1.6	1,666.2	0.5
Southeast	4,859.2	0.9	2,589.1	-5.8	2,270.1	9.9
West Central	3,597.0	22.1	1,802.1	19.6	1,794.9	24.8
North Central	3,704.1	8.5	2,149.1	3.9	1,555.1	15.5
North	1,994.7	18.1	623.9	31.7	1,370.8	12.8
Total	20,505.4	6.2	10,940.6	2.3	9,564.9	11.1

Source: USDA Forest Service, Alabama Forest Survey, 1982

Table 4-10  
Volume of Growing-Stock and Sawtimber on Nonfederal  
Forest Land by Ownership Classes, and by Softwoods  
and Hardwoods, Alabama 1982 <sup>1/</sup>

Ownership Class	Growing-Stock			Sawtimber		
	All Species	Softwood	Hardwood	All Species	Softwood	Hardwood
	-----Million Cubic Feet-----			-----Million Board Feet-----		
Forest Industry	4,490.0	2,798.1	1,691.9	2,554.0	1,746.5	807.5
Farmer	6,109.9	2,838.5	3,271.4	3,351.2	1,908.8	1,442.4
Miscellaneous						
Private	9,677.6	5,178.9	4,498.8	5,199.5	3,233.1	1,966.4
Public	227.8	125.0	102.8	136.5	92.8	43.7
All Ownerships	20,505.4	10,940.6	9,564.9	11,241.2	6,981.2	4,260.0

<sup>1/</sup> Totals may not add due to rounding

Source: USDA Forest Service, Alabama Forest Survey, 1982



### Growth and Removals

Alabama's nonfederal forests have been growing slightly more timber than has been cut with the trend toward a smaller growth-cut ratio. The 1982 Forest Survey estimated a net annual change in growing-stock (net growth minus the timber removals) of 125.8 million cubic feet for the period 1972-82, with only 5 percent of this volume increase being softwoods (Tables 4-11 and 4-12).

When timber removals from the growing-stock are compared to net growth of growing-stock, the trend indicates that the rate of growth is decreasing while the rate of cut is increasing. The 1972 Forest Survey indicated an average growth rate of 55 cubic feet per acre per year while the 1982 Forest Survey showed an average growth rate of 45 cubic feet per acre per year. While the average growth rate of growing stock was decreasing 18 percent, timber removals increased 10 percent.

Timber removals are the net volume of trees removed from the inventory by harvesting, cultural operations, land clearing or changes in land use. During the period 1972-82, an average of 811.9 million cubic feet of timber was removed annually from commercial forest land in Alabama.

The 1982 Forest Survey indicated that during the period 1972-82, almost 3.3 billion board feet of sawtimber was removed annually from commercial nonfederal forest land. The major portion of timber removals are softwood species. Almost 74 percent of growing-stock removals were softwood species.

### Distribution of Timber Removals by Region

The distribution of timber removals in Alabama follows much the same pattern as growth with the concentration of removals being in the southern and central portions of the state. The three leading regions for both growing-stock and sawtimber removals are Southeast, Southwest-North, and North-Central. These 3 regions provide 58 percent of the removals from growing-stock trees. The North and Southwest-South regions provide the least amounts of timber removals, a combined 16 percent of the total removals.

### Growth-Cut Relationships by Region

The 1982 Forest Survey indicated that the North Region was cutting the smallest proportion of net growth, and the Southwest-South Region was cutting the highest proportion (Table 4-13). Net growth exceeded timber removals in all regions. In 1972, 62.6 percent of net growth was being harvested.

Removals exceeded net growth for softwoods in four of the six regions; statewide removals averaged 99 percent of net growth. However, hardwoods are not being as heavily cut since removals average 63 percent of the net growth statewide (Table 4-14).



Table 4-11

Periodic Net Annual Growth of Growing-Stock  
on Nonfederal Forest Land, 1982

Region	All Species	Softwood	Hardwood
----- Million Cubic Feet -----			
Southwest-South	85.0	69.2	15.8
Southwest-North	189.0	128.9	60.1
Southeast	219.2	145.4	73.8
West Central	185.6	118.5	67.1
North Central	181.8	120.7	61.1
North	77.2	27.4	49.8
Total	937.8	610.1	327.7

Source: USDA Forest Service, Alabama Forest Survey, 1982

Table 4-12

Periodic Timber Removals From  
Growing-Stock on Nonfederal Forest Land, 1982

Region	All Species	Softwood	Hardwood
----- Million Cubic Feet -----			
Southwest-South	84.0	70.0	14.0
Southwest-North	175.5	130.3	45.2
Southeast	214.1	163.6	50.5
West Central	138.6	100.0	38.6
North Central	157.5	122.1	35.4
North	42.4	18.4	24.0
Totals	812.1	604.4	207.7

Source: USDA Forest Service, Alabama Forest Survey, 1982

Table 4-13

Timber Removals as a Percent of Net Growth  
of Growing-Stock, All Species by Region  
1972 and 1982

Region	1972	1982
-----Percent-----		
Southwest-South	76.3	98.5
Southwest-North	78.1	93.0
Southeast	66.3	97.7
West Central	51.7	74.7
North Central	50.4	86.5
North	41.9	55.1
Average	62.6	86.6

Source: USDA Forest Service, Alabama Forest Survey, 1972 and 1982

Table 4-14

Removals as a Percent of Net Growth of Growing-Stock Where  
Cut Exceeds Growth by Regions for Softwoods and Hardwoods, 1972-82

Region	Softwood	Hardwood
-----Percent-----		
Southwest-South	101	89
Southwest-North	101	75
Southeast	113	68
West Central	84	58
North Central	101	58
North	67	48
Average	99	63

Source: USDA Forest Service, Alabama Forest Survey, 1982

## Utilization of Timber

Some of the timber volumes removed from the commercial forest lands of Alabama are not being used for wood products. The most recent study of roundwood utilization for Alabama was done in conjunction with the 1972 Forest Survey. That study indicated that 92 percent of all roundwood severed left the woods as industrial products, 5 percent remained as logging residue, and 3 percent was destroyed in operations such as land clearing and timber stand improvement.

The annual timber severance tax data compiled annually by the Alabama Forestry Commission provides information on the use of industrial roundwood. Between 1972 and 1982, 41 percent of total industrial roundwood was used for sawlogs, veneer logs and bolts, 57 percent was used for pulpwood, and the remaining 2 percent was utilized for a variety of products, including cooperage, piling, poles, posts, and crossties.

## Improvements From Utilization of Timber

Assuming past trends of roundwood utilization, 71 million cubic feet or 8 percent of annual timber removals are residues, not utilized for timber products. The further utilization of timber volumes severed from forest stands could extend Alabama's timber resources without cutting additional volumes of wood.

Data from the 1982 Forest Survey indicates that forests in Alabama contain approximately 226 million cubic feet of salvable dead trees. This volume represents about 26 percent of the volume of annual timber removals and more efficient salvage could significantly increase timber harvest without cutting more growing trees. In 1982, there were an estimated 3.3 billion cubic feet of rough and rotten trees. These trees, which are not currently utilized, have a total volume almost four times the volume removed annually. In addition to timber not currently utilized, the improved utilization of wood being processed into lumber and other products can also significantly extend the timber resource without cutting additional trees.

Other extensions of the timber resource are possible through the improvement of harvesting techniques, including felling and bucking, improvement in the end-use of wood products, and in the recovery of wood products that are being disposed of in sanitary land fills, including paper products.

To achieve the full benefits of improved utilization, research is needed to develop the necessary technology and to determine the potential extent to which improved utilization can extend the timber resource. From the limited knowledge available at this time, it is evident that significant improvements can be made.

## PRIME FARMLAND

Prime farmland is defined as land that is best suited to producing food, feed, forage, fiber, and oilseed crops. This land has the quality, growing season, and moisture supply needed to economically produce sustained high yields of crops and is available for this use. Prime farmland includes areas that are currently being used for crops, pasture, timber production, or other farm-related purposes. It produces high yields with minimal inputs of energy and economic resources.



The 1982 NRI indicates there are 7.3 million acres of prime farmland in Alabama. This is about 25 percent of the total nonfederal rural land in the state. Of this total, 2.9 million acres are presently in crops, 2.7 million in forest, and 1.5 million in pasture. The remainder (134,000 acres) is in other minor uses.

The distribution of prime farmland by land use, land capability classes, and MLRA's in Alabama is shown in Tables 4-15 and 4-16. The largest amount of prime farmland, almost 80 percent, is in Capability Classes I and II. The remainder is in Classes III and IV. Over 4 million acres, or 56 percent of the prime farmland is in the Coastal Plain - Gulf Coast Flatwoods, MLRA 133A/152A.

Areas of Alabama with the highest utilization of prime farmland for crop production occur across the northern section of the state (Figure 4-8). The Highland Rim, MLRA 122, and the Appalachian Ridges and Valleys, MLRA 128, have the majority of their prime farmland in crop production with 67 and 54 percent, respectively. Sand Mountain - Cumberland Plateaus, MLRA 129/125, Coastal Plain - Gulf Coast Flatwoods, MLRA 133A/152A, and Blackland Prairies, MLRA 135, each utilize between 34 and 38 percent of their prime farmland for crops. Only 12 percent of the prime farmland in the Piedmont, MLRA 136, is in crops.

Distribution of prime farmland by land use by land capability classes within the several MLRA's of the state is shown in Appendix B. Recently published county soil surveys indicate those soil map units within the county that meet the definition of prime farmland.

Table 4-15

PRIME FARMLAND, 1982, BY LAND USE,  
BY LAND CAPABILITY CLASS AND SUBCLASS

CLASS/ SUBCLASS	NON-FEDERAL RURAL LAND				TOTAL
	CROPLAND	PASTURELAND	FOREST LAND	MINOR USES	
	-----1000 ACRES-----				
I	327.6	53.4	153.9	15.5	550.4
IIe	1573.9	782.4	1240.4	80.9	3677.6
IIIs	24.8	7.5	8.5	5.1	45.9
IIW	468.5	322.9	642.0	1.5	1434.9
IIIe	418.4	294.3	590.9	29.9	1333.5
IIIW	76.6	35.4	113.9	1.4	227.3
IVe		1.2			1.2
STATE TOTAL	2889.8	1497.1	2749.6	134.3	7270.8

-----  
SOURCE: 1982 NRI

Table 4-16

PRIME FARMLAND, 1982, BY LAND USE,  
BY MLRA

NON-FEDERAL RURAL LAND					
MLRA	CROPLAND	PASTURELAND	FOREST LAND	MINOR USES	TOTAL
	-----1000 ACRES-----				
122	172.1	50.6	29.6	3.5	255.8
128	567.8	229.9	227.8	20.4	1045.9
129/125	283.4	247.5	195.4	28.6	754.9
133A/152A	1542.2	638.0	1849.5	71.1	4100.8
135	294.9	272.9	287.1	7.5	862.4
136	29.4	58.2	160.2	3.2	251.0
STATE TOTAL	2889.8	1497.1	2749.6	134.3	7270.8

-----  
SOURCE: 1982 NRI

### POTENTIAL CROPLAND

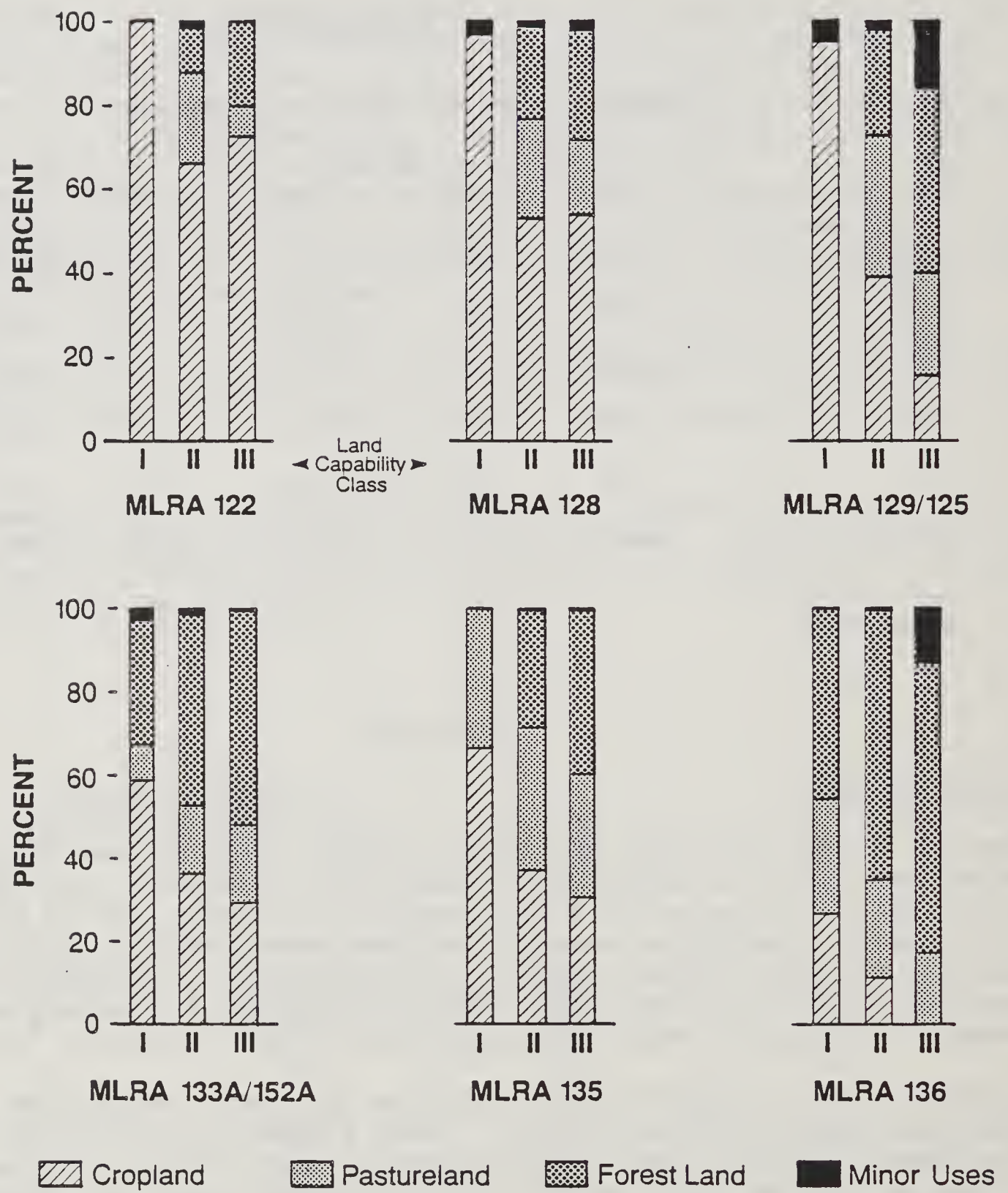
Alabama has 5.1 million acres in pasture, forest, and minor uses that are rated as having medium to high potential for conversion to cropland, according to the 1982 NRI. Sixty percent of all pastureland in Alabama, or 2.3 million acres, is rated as having potential for conversion to cropland, while 13 percent of the state's forest land, or 2.8 million acres, is potentially convertible (Tables 4-17 and 4-18). Only 57,000 acres of land in minor uses throughout the state are rated as having potential for conversion to cropland.

The evaluation of the potential for conversion of land in other uses to cropland was based on several factors. These included soil and water factors such as common flooding, highly erodible soils, rocky surface, and wetland. Other reasons include land held for urban development, small or isolated tracts inefficient to farm, and land committed to other uses on a long-term basis. The effort necessary for conversion was taken into consideration in rating the land's potential for growing crops.

The amount of existing cropland in 1982, compared to the potential for conversion to cropland within each MLRA and statewide is displayed in Figure 4-9. Each MLRA has a moderate to large amount of land either in pasture or forest with medium to high potential for conversion to cropland. The amount of land having potential for conversion to cropland by land capability classes within individual MLRA's is displayed in Appendix B.

Figure 4-8

# Prime Farmland By Land Use In Alabama



Source: 1982 NRI



Table 4-17

PASTURELAND, FOREST LAND AND MINOR USES HAVING MEDIUM  
TO HIGH POTENTIAL FOR CONVERSION TO CROPLAND, 1982,  
BY LAND CAPABILITY CLASS AND SUBCLASS

NON-FEDERAL RURAL LAND								
CLASS/ SUBCLASS	PASTURELAND		FOREST LAND		MINOR USES		TOTALS	
	MEDIUM	HIGH	MEDIUM	HIGH	MEDIUM	HIGH	MEDIUM	HIGH
-----1000 ACRES-----								
I	14.3	25.7	31.6	53.3		0.8	45.9	79.8
IIe	372.0	345.8	411.1	184.8	6.1	12.7	789.2	543.3
IIIs	14.1	5.3	27.8	7.5	1.2		43.1	12.8
IIw	152.3	135.4	236.3	82.1	1.3		389.9	217.5
IIIe	416.5	179.2	552.1	87.2	7.3		975.9	266.4
IIIs	51.2	24.9	187.4	16.0	6.8	1.5	245.4	42.4
IIIw	44.9	29.4	112.0	21.7	2.5		159.4	51.1
IVe	202.2	34.1	311.0	26.4	8.2	1.1	521.4	61.6
IVs	37.4	5.1	82.6	6.4			120.0	11.5
IVw	83.0	28.7	113.0	13.3	3.2		199.2	42.0
IVw, VIe VIIs & VIw] 1/	89.4	0.9	222.4		4.4		316.2	0.9
STATE TOTAL	1477.3	814.5	2287.3	498.7	41.0	16.1	3805.6	1329.3

1/ LAND IN THESE CATEGORIES ARE NORMALLY UNSUITED FOR INTENSIVE CROPPING BECAUSE  
OF SOIL RELATED PROBLEMS SUCH AS EROSION, WETNESS, OR FLOODING

SOURCE: 1982 NRI

Table 4-18

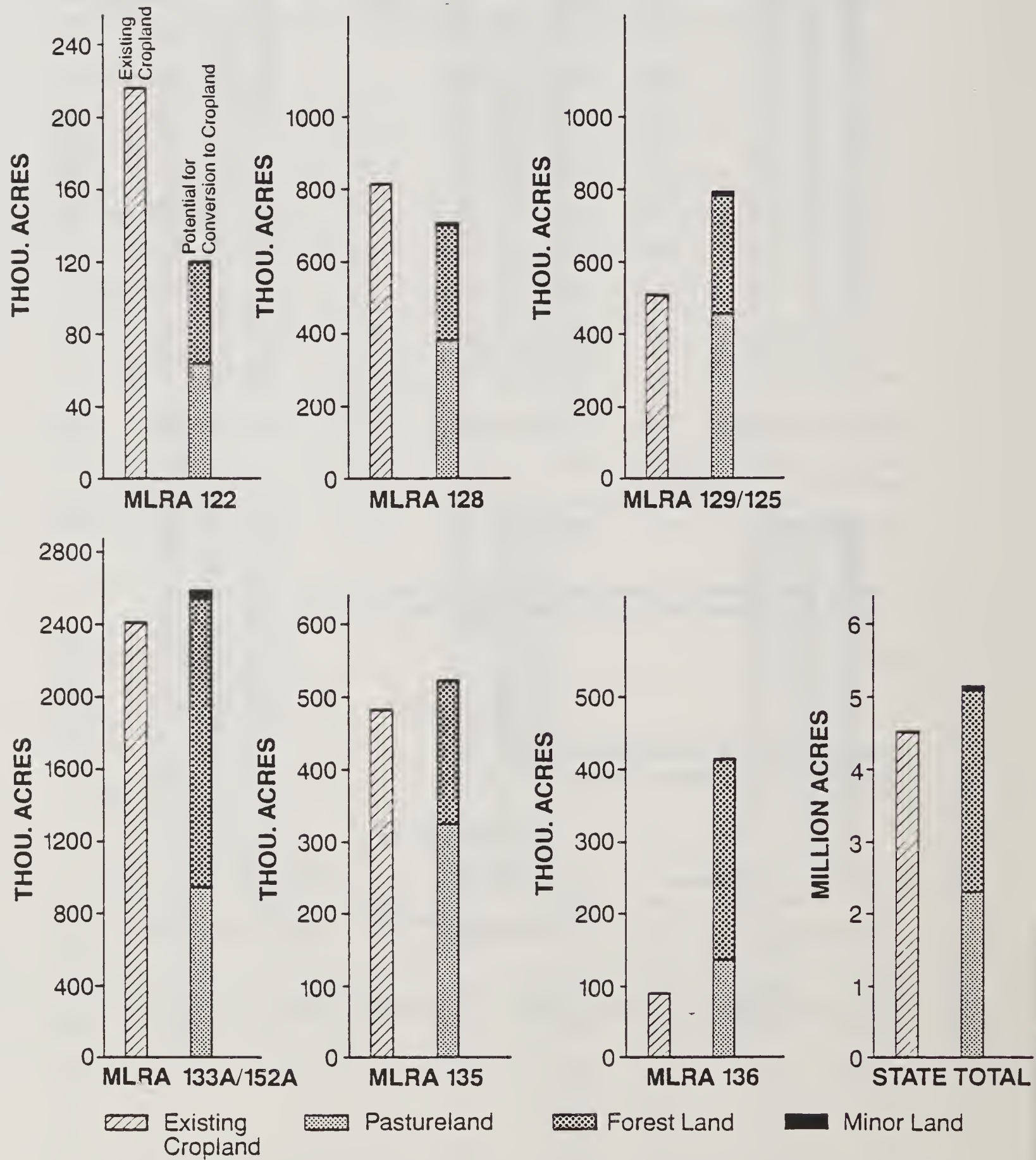
PASTURELAND, FOREST LAND AND MINOR USES HAVING MEDIUM  
TO HIGH POTENTIAL FOR CONVERSION TO CROPLAND, 1982,  
BY MLRA

NON-FEDERAL RURAL LAND								
MLRA	PASTURELAND		FOREST LAND		MINOR USES		TOTALS	
	MEDIUM	HIGH	MEDIUM	HIGH	MEDIUM	HIGH	MEDIUM	HIGH
-----1000 ACRES-----								
122	33.6	31.0	37.7	18.2			71.3	49.2
128	244.8	139.0	251.2	65.1	7.1	3.5	503.1	207.6
129/125	283.3	166.3	282.9	45.2	6.4	0.9	572.6	212.4
133A/152A	624.0	316.0	1293.3	314.0	24.4	11.7	1941.7	641.7
135	187.4	135.9	154.8	41.1	1.7		343.9	177.0
136	104.2	26.3	267.4	15.1	1.4		373.0	41.4
STATE TOTAL	1477.3	814.5	2287.3	498.7	41.0	16.1	3805.6	1329.3

SOURCE: 1982 NRI

Figure 4-9

**Existing Cropland vs Potential for Conversion of Pastureland, Forestland and Minor Uses to Cropland, 1982, by MLRA**



Source: 1982 NRI

## PRIME FOREST LAND

Prime forest land is a designation using the criteria of soil which has the productive capacity to produce a given amount of wood fiber each year. Prime forest land can grow at least 85 cubic ft/ac/yr and "prime plus" forest land can grow at least 120 cubic ft/ac/yr.

Soils were grouped according to productivity and, by using applicable site indices, each soil group was categorized as non-prime, prime or "prime plus" (Table 4-19).

Table 4-19

### Categories of Prime Forest Land by Major Land Resource Areas

MLRA	Prime-Plus	Prime	Non-Prime	Total
-----1,000 Acres-----				
122	6.1	124.3	2.8	133.2
128	79.4	1,159.8	723.6	1,962.8
129/125	64.1	865.9	1,973.7	2,903.7
133A/152A	1,073.0	10,225.8	1,192.7	12,491.5
135	192.6	415.1	264.5	872.2
136	158.7	1,224.6	886.6	2,269.9
Total	1,573.9	14,015.5	5,043.9	20,633.3

Source: 1982 NRI

## MARGINAL LAND IN CROP PRODUCTION

Marginal land has been defined in Alabama as erodible land on which a major crop cannot be grown at a profit considering all production costs and the amortized establishment and maintenance cost of a resource management system (conservation practices adequate for resource base protection), but excluding the cost of land and management.

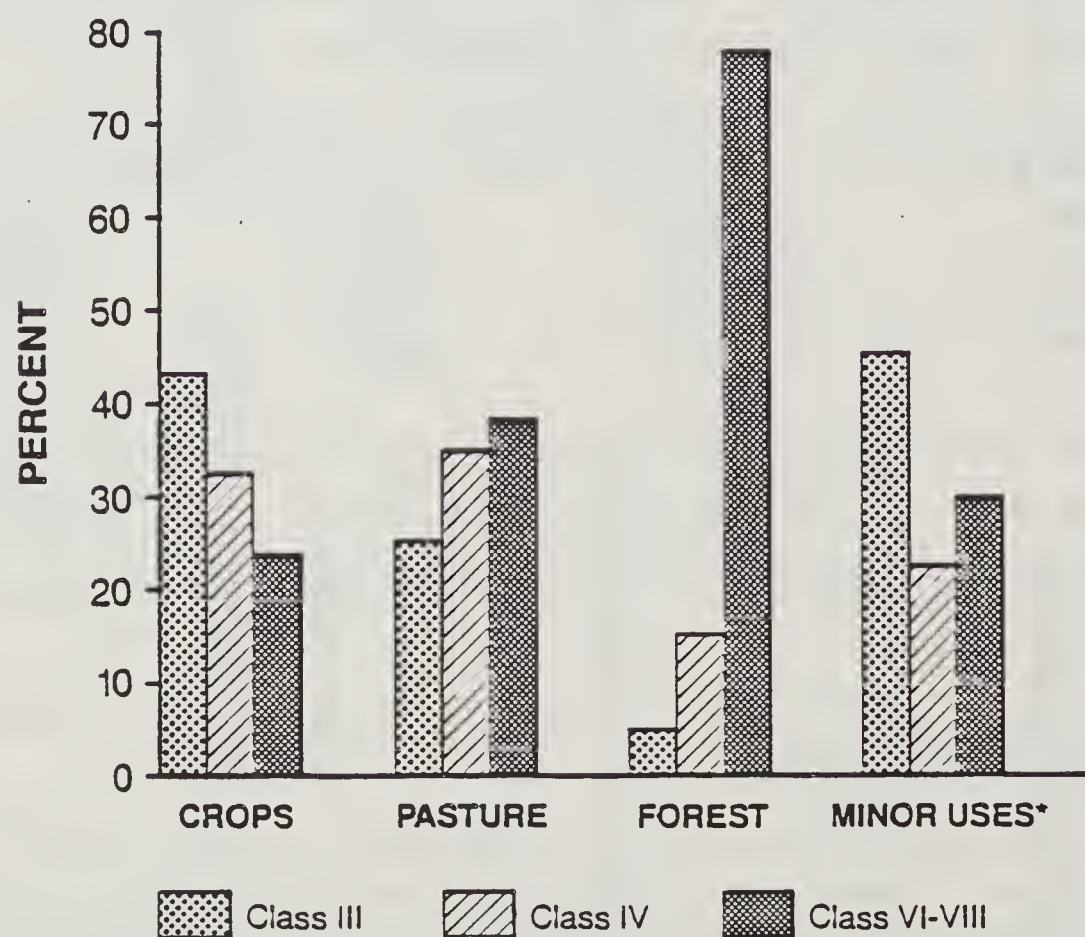
In applying this definition, cropping would not be considered economical if returns from the major crop(s) are less than those of the most profitable alternative enterprise that could be produced in a less intensive land use. Less intensive enterprises include pasture, continuous hay, and forest or other use where surface exposure and tillage would be infrequent.



Land presently in crops that is designated as marginal or unsuitable for crops amounts to 727,000 acres, or 16 percent of the total cropland in 1982. The majority is in land capability classes IIe, 43 percent, and IVe, 33 percent (Figure 4-10).

The distribution of erodible land marginal or unsuitable for crops in Alabama in 1982 by land capability class and by MLRA is shown in Tables 4-20 and 4-21. The acreage of marginal cropland by land capability classes for each MLRA appear in Appendix B.

Figure 4-10  
Erodible Land Marginal for Crops, 1982 by Current Land Use



Source: 1982 NRI

\*Farmsteads and other land in farms.

Table 4-20

ERODIBLE LAND MARGINAL OR NOT SUITABLE FOR CROPS, 1982,  
BY CURRENT LAND USE, BY LAND  
CAPABILITY CLASS AND SUBCLASS

CURRENT LAND USE <sup>1/</sup>					
CLASS/ SUBCLASS	CROPS	PASTURE	FARMSTEADS AND OTHER LAND		TOTAL
			FOREST	IN FARMS	
-----1000 ACRES-----					
IIIe	315.1	393.7	607.6	34.9	1351.3
IVe	237.6	508.9	2230.7	17.3	2994.5
IVs	3.0	7.8	62.7		73.5
VIe	86.5	291.0	2014.6	7.3	2399.4
VIs	35.1	46.9	577.5	0.3	659.8
VIIe	33.0	151.0	4880.1	10.7	5074.8
VIIIs	16.4	93.6	2141.0	4.8	2255.8
VIIIIs			13.5		13.5
STATE TOTAL	726.7	1492.9	12527.7	75.3	14822.6

<sup>1/</sup> NON-FEDERAL RURAL LAND

SOURCE: 1982 NRI

Table 4-21

ERODIBLE LAND MARGINAL OR NOT SUITABLE FOR CROPS, 1982,  
BY CURRENT LAND USE, BY MLRA

MLRA	CURRENT LAND USE 1/				
	CROPS	PASTURE	FOREST	FARMSTEADS AND	TOTAL
				OTHER LAND	
				IN FARMS	
-----1000 ACRES-----					
122	17.1	23.4	51.7	1.0	93.2
128	91.8	165.7	1407.1	15.5	1680.1
129/125	200.9	356.7	2636.2	41.2	3235.0
133A/152A	207.7	494.7	6337.5	14.8	7054.7
135	184.6	326.6	424.7		935.9
136	24.6	125.8	1670.5	2.8	1823.7
STATE TOTAL	726.7	1492.9	12527.7	75.3	14822.6

<sup>1/</sup> NON-FEDERAL RURAL LAND

SOURCE: 1982 NRI

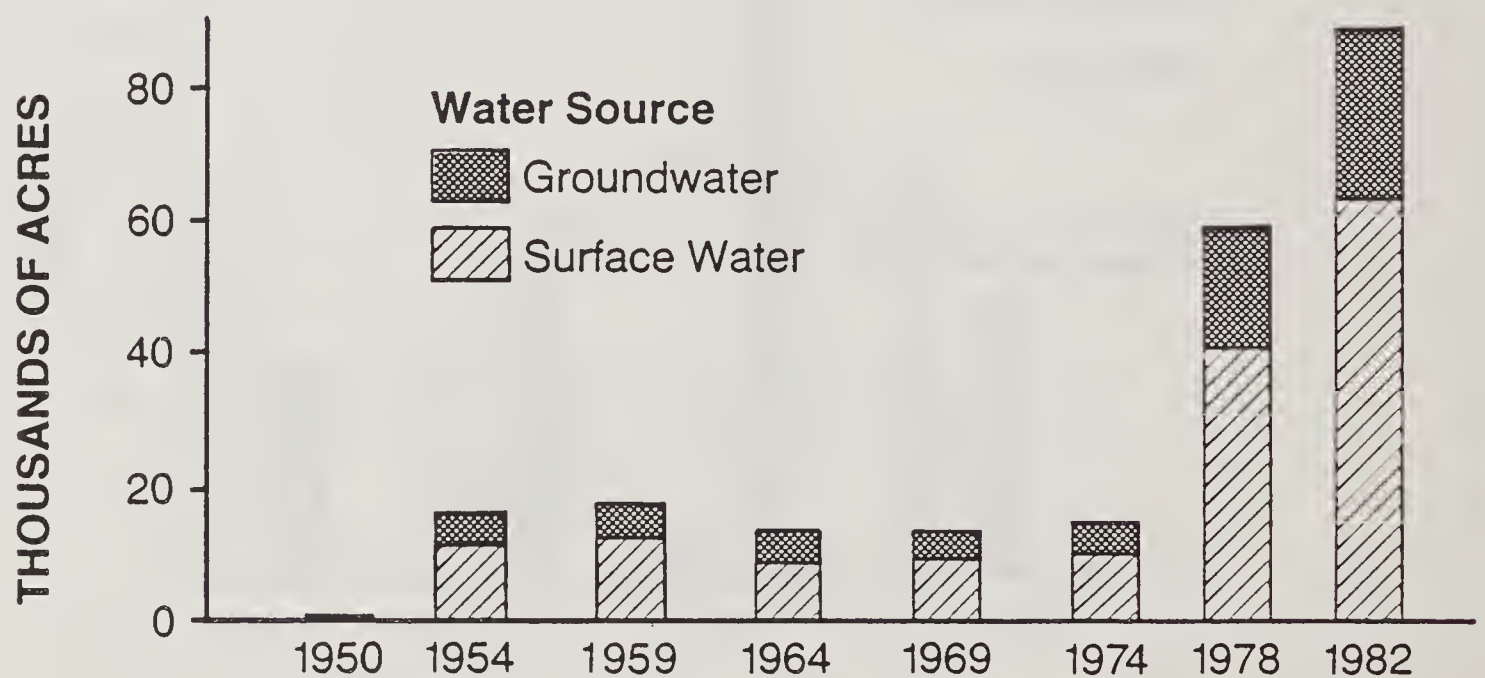
## IRRIGATION

### Irrigated Land

The extreme droughts of the 1950's resulted in a tremendous increase in irrigation. Prior to this time, irrigation in Alabama was almost nonexistent (Figure 4-11). During the 1960's, increased rainfall lessened the need for irrigation resulting in a decrease in land irrigated. Inflation in the 1970's and increased production costs resulted in reduced profits for many farmers. With the increasing investments required, farmers began to realize the need to insure some yearly return on their investment. This has resulted in a large increase in land irrigated from 1974 to 1982.

Figure 4- 11

### Land Irrigated in Alabama, 1950 to 1982



Sources: 1978 Census of Agriculture (1950-1978 Data)  
1982 NRI (1982 Data)



In 1982, approximately 89,000 acres, or 2 percent of the total cropland was irrigated in Alabama. Eighty percent of the irrigation occurred in the Coastal Plain MLRA, 75 percent within nine counties (Figure 4-12). Weather patterns are such in these counties that periodic droughts have affected crop yields more than other areas of the state. Also, this area lends itself to irrigation due to the soils, topography, and available water supply in areas suitable for irrigation.

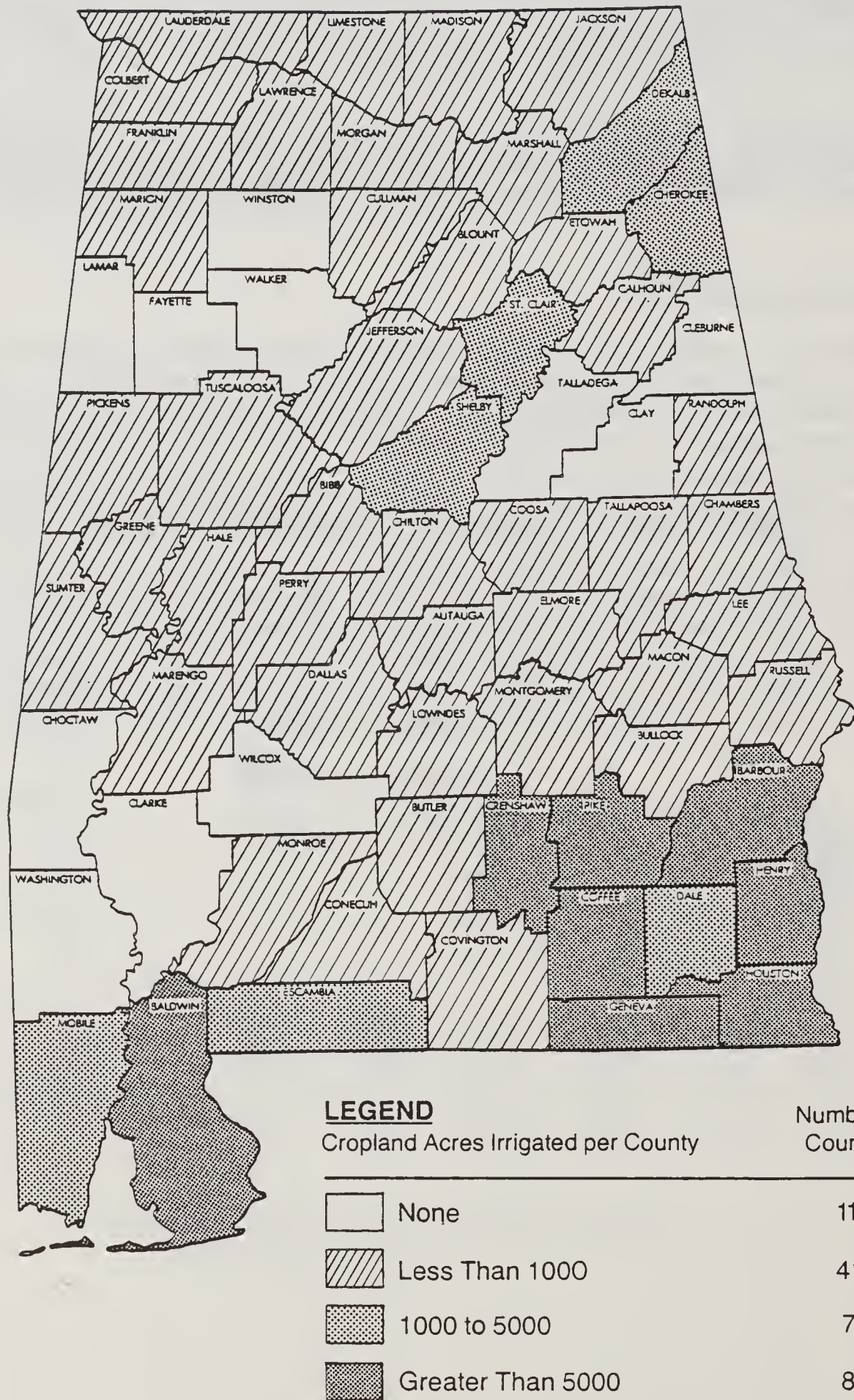
Four crops comprise 80,000 acres or 90 percent of the state's irrigated land: corn (30,000 acres), cotton (3,000 acres), peanuts (33,000 acres), and soybeans (14,000 acres). Cotton is the only crop being irrigated primarily in north Alabama.

### Irrigation Potential

Of the 8.3 million acres of agricultural land in Alabama, approximately 4.3 million (52 percent) are considered suitable for irrigation. Land suitability is based on soil productivity, erosion resistance, and ability to absorb and hold water in the plant root zone. All soils suitable for irrigation are in land capability classes I to IV (Table 4-22). Forty percent or 1.8 million acres of the state's soils suitable for irrigation are located in the Coastal Plain MLRA in south Alabama (Figure 4-13). Table 4-22 shows that 2.9 million acres (67 percent) of the state's soils rated suitable for irrigation are currently being cropped. This represents 69 percent of all land cropped in the state. Only 39 percent of the states' pastureland is on soils suitable for irrigation. It is expected that the majority of irrigation expansion will occur on land presently in cropland since 72 percent of the Coastal Plain soils rated suitable for irrigation are presently used for crop production.

Figure 4-12

## Irrigation in Alabama, 1982



Source: USDA-SCS, Auburn, AL

Table 4-22

## Agricultural Land Suitable For Irrigation

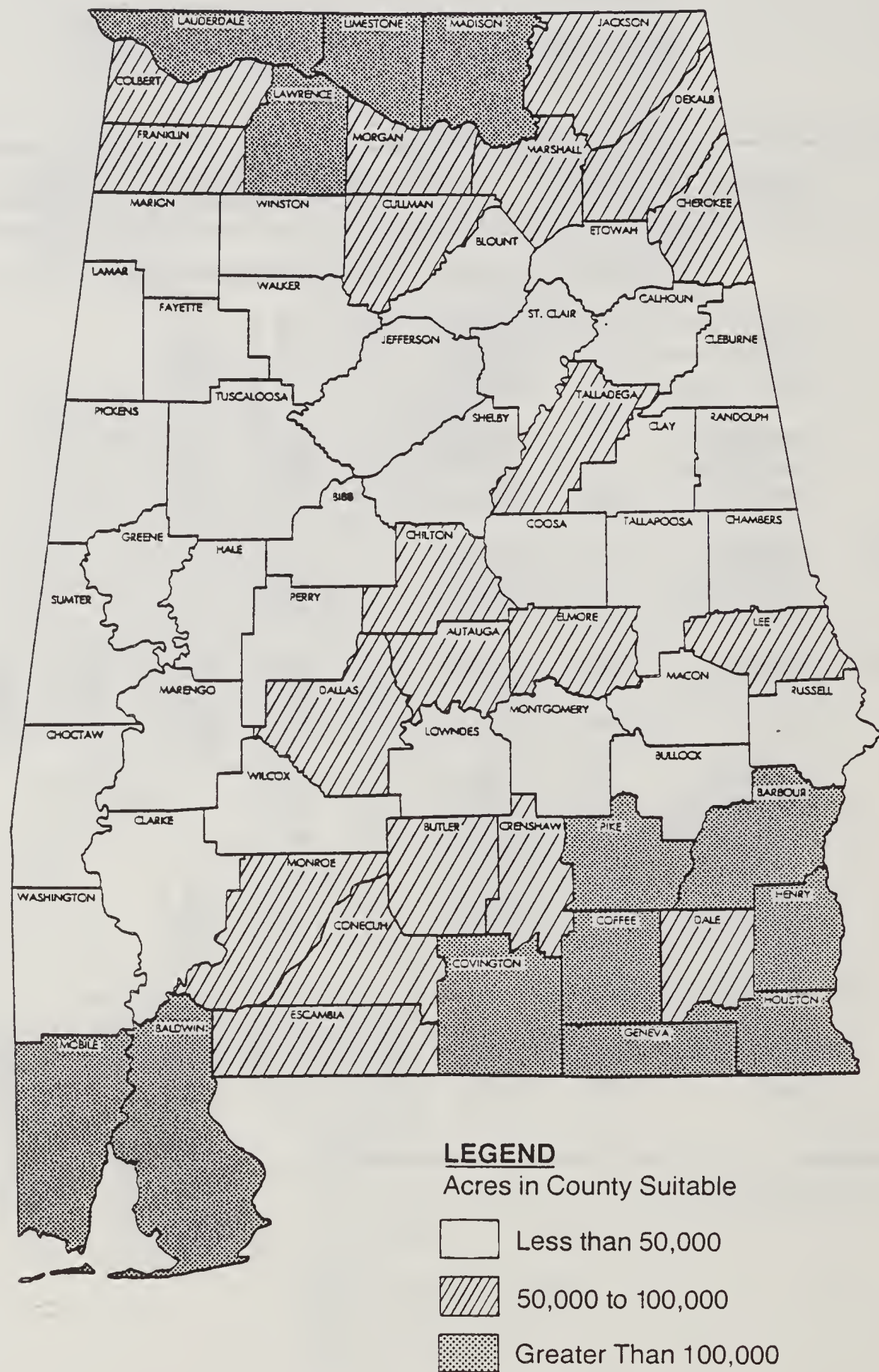
MLRA	Present Land Use	Land Capability Class/Subclass							TOTAL
		I	IIe	IIs	IIw	IIIe	IIIs	IVs	
-----1000 Acres-----									
122	Cropland	2.4	120.8	1.2	33.3	19.3			177.0
	Pastureland		35.3		15.2	19.1			69.6
	Total	2.4	156.1	1.2	48.5	38.4			246.6
128	Cropland	27.6	299.9		139.3	92.9	1.3		561.0
	Pastureland	2.5	138.5		58.4	65.7			265.1
	Total	30.1	438.4		197.7	158.6	1.3		826.1
129/125	Cropland	4.0	254.9		12.8	1.9			273.6
	Pastureland		190.9		32.1				223.0
	Total	4.0	445.8		44.9	1.9			496.6
133A/152A	Cropland	265.8	716.8	81.9	197.6	216.1	232.4	68.9	1779.5
	Pastureland	32.4	315.5	22.8	93.1	142.1	87.4	40.8	734.1
	Total	298.2	1032.3	104.7	290.7	358.2	319.8	109.7	2513.6
135	Cropland		15.1		25.0		3.0		43.1
	Pastureland		20.1		15.3				35.4
	Total		35.2		40.3		3.0		78.5
136	Cropland		16.8		7.6	16.0			40.4
	Pastureland	4.4	31.7		19.4	60.7			116.2
	Total	4.4	48.5		27.0	76.7			156.6
State	Cropland	299.8	1424.3	83.1	415.6	346.2	236.7	68.9	2874.6
	Pastureland	39.3	732.0	22.8	233.5	287.6	87.4	40.8	1443.4
	Total	339.1	2156.3	105.9	649.1	633.8	324.1	109.7	4318.0

Source: 1982 - NRI



Figure 4-13

## Agricultural Land Suitable For Irrigation



Source: USDA-SCS, Auburn, AL

## FLOOD PLAIN LAND USE

Alabama has approximately 5.36 million acres of flood plain lands, about 16 percent of the state, which are flooded once or more every 100 years by streams flowing out of their banks. While a large percentage of the 5.36 million acres are not flooded annually, a portion of the flood plain is flooded an average of 3 to 5 times annually. Thus, considerable flood damages occur annually to crops and pasture.

Flood plain acreages and land use for each of the state's 629 watersheds have been measured. These data have been compiled and are presented by hydrologic subregion (Table 4-23 and Figure 4-14), and by counties (Appendix D). In 1982, the state's flood plains were 8 percent cropland, 7 percent pastureland, 66 percent forest land, 2 percent urban and other land, and 17 percent water.

The state's flood plains are comprised of two categories: areas along rivers and large streams (riverine) and the areas adjacent to smaller streams (tributary). Riverine flood plain consists of the flood prone areas along the state's rivers and large streams, which are flooded by overflow from contributing areas of 250,000 acres or more. Tributary flood plain comprises the remainder of the state's flood prone area. Table 4-23 indicates that 2.80 million acres, or 52 percent of the state's flood prone areas are in tributary flood plains.

Sixty-five percent (530,000 acres) of the state's flood plain cropland and pastureland occur on tributary flood plains. This represents 19 percent of the state's tributary flood plain, which is currently used for cropland and pastureland. Figure 4-15 shows that the northern and central portions of the state have the greatest acreages of cropland and pastureland in tributary flood plains with flood damages exceeding other areas of the state.

In addition to the flood plain areas along Alabama's streams, the coastal areas of Baldwin and Mobile Counties have areas subject to flood damage by tropical storms and hurricanes.

Table 4-23

FLOOD PLAIN LAND USE BY HYDROLOGIC SUBREGION  
WITHIN ALABAMA, 1982  
(ACRES) \*

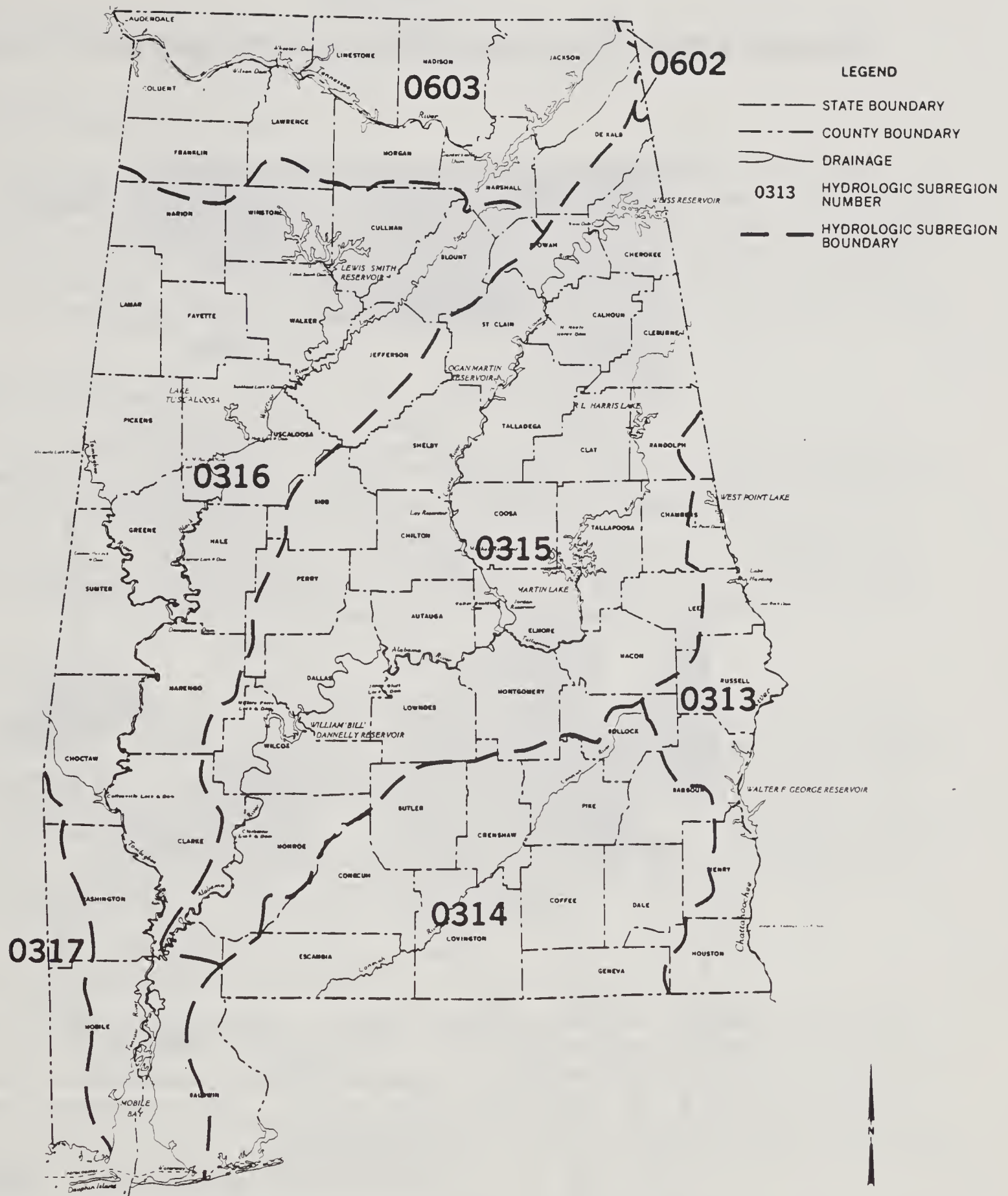
HYDROLOGIC SUBREGION	DRAINAGE AREA	FLOODPLAIN TYPE	-----FLOODPLAIN LAND USE-----							SUB-W/S IN SUBREGION (NO.)
			TOTAL	CROPLAND	PASTURELAND	FORESTLAND	URBAN	OTHER	WATER	
313 APALACHICOLA		TRIBUTARY	205,100	7,100	7,800	185,700	400	800	3,300	
		RIVERINE	57,700	4,200	4,200	30,500	600	1,200	17,000	
	TOTAL 1,812,356		262,800	11,300	12,000	216,200	1,000	2,000	20,300	30
314 CHOCTAWHATCHEE		TRIBUTARY	564,000	3,200	8,700	525,900	3,200	600	22,400	
ESCAMBIA		RIVERINE	164,100	5,200	5,700	149,300	600	200	3,100	
	TOTAL 5,423,060		728,100	8,400	14,400	675,200	3,800	800	25,500	107
315 ALABAMA		TRIBUTARY	803,500	52,900	112,000	617,100	8,600	7,200	5,700	
		RIVERINE	748,100	86,900	47,100	399,400	8,700	9,100	196,900	
	TOTAL 11,048,412		1,551,600	139,800	159,100	1,016,500	17,300	16,300	202,600	206
316 MOBILE-		TRIBUTARY	796,200	53,700	91,600	618,000	18,400	6,000	8,500	
TOMBIGBEE		RIVERINE	1,167,100	57,500	28,700	722,500	15,000	8,000	335,400	
	TOTAL 10,123,977		1,963,300	111,200	120,300	1,340,500	33,400	14,000	343,900	177
317 PASCAGOULA		TRIBUTARY	54,900	1,400	200	51,200	0	0	2,100	
		RIVERINE	151,100	100	100	43,200	4,400	100	103,200	
	TOTAL 651,513		206,000	1,500	300	94,400	4,400	100	105,300	16
602 MIDDLE TENNESSEE-		TRIBUTARY	1,400	0	1,000	400	0	0	0	
HIWASSEE		RIVERINE	0	0	0	0	0	0	0	
	TOTAL 33,829		1,400	0	1,000	400	0	0	0	2
603 MIDDLE TENNESSEE-		TRIBUTARY	376,400	122,300	68,100	156,000	8,500	4,700	16,800	
ELK		RIVERINE	269,000	40,800	11,700	41,500	1,700	1,200	172,100	
	TOTAL 4,334,959		645,400	163,100	79,800	197,500	10,200	5,900	188,900	91
STATE TOTAL		TRIBUTARY	2,801,500	240,600	289,400	2,154,300	39,100	19,300	58,800	
		RIVERINE	2,557,100	194,700	97,500	1,386,400	31,000	19,800	827,700	
	TOTAL 33,428,106		5,358,600	435,300	386,900	3,540,700	70,100	39,100	886,500	629

\* Acreage figures represent land areas within the boundaries of the State of Alabama. Watershed drainage units flowing into or out of the state have additional area not shown in the table. Coastal waters of Baldwin and Mobile counties are included in the drainage areas. Thus, the state's total area of 33,428,106 acres exceeds the U.S. Census Bureau figure of 33,091,067 which does not include these coastal waters.

SOURCE: Floodplain Land Use, USDA-SCS, Auburn, AL



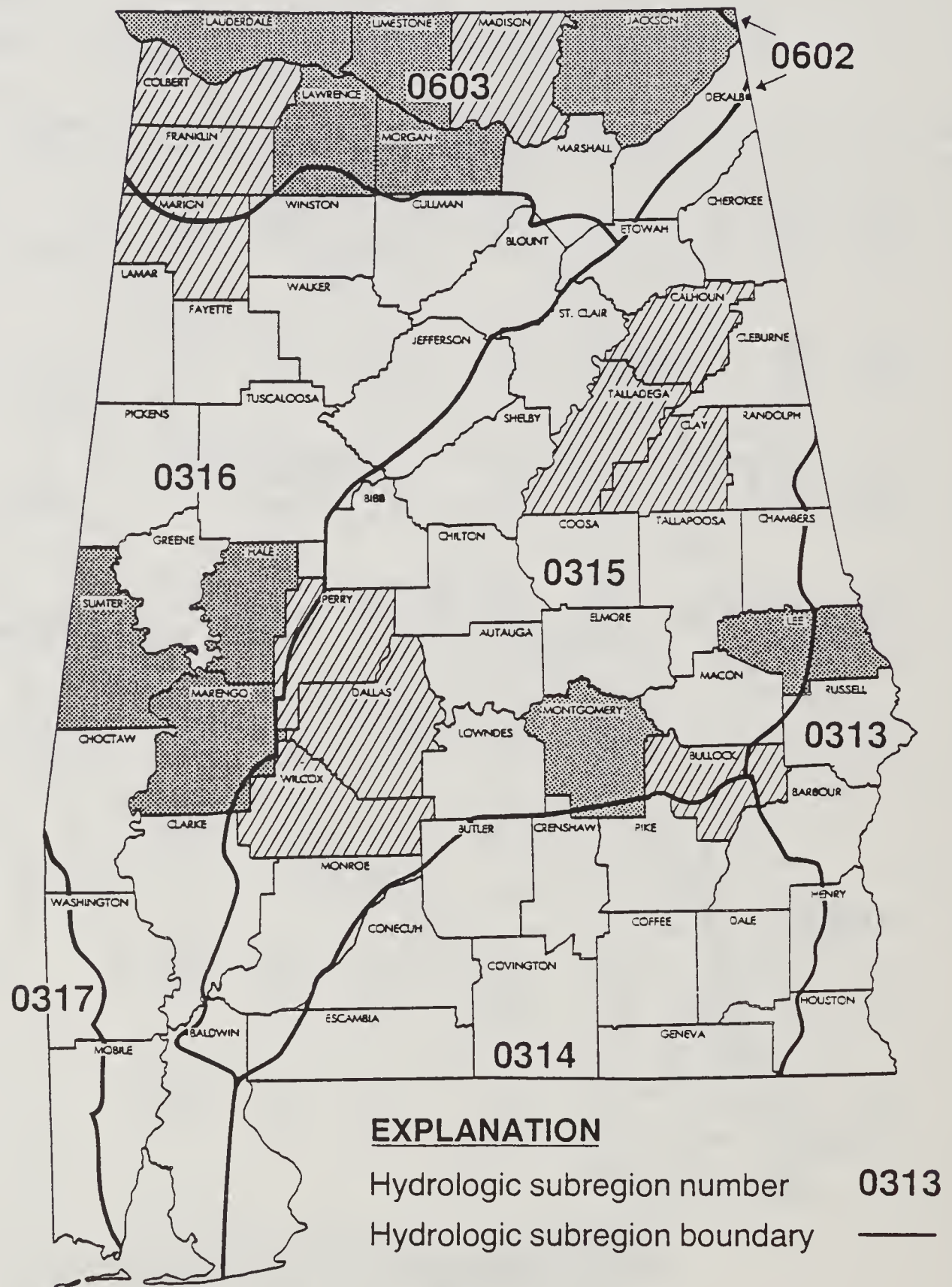
Figure 4-14



Source: USDA, SCS


Figure 4-15

# Tributary Flood Plain Areas, Acres of Cropland and Pastureland



## LEGEND

Cropland & Pastureland Flood Plain Acres per County

	Less than 10,000		10,000 to 20,000		Greater than 20,000
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Source: USDA-SCS, Auburn, AL



## WATER

### CLIMATIC EFFECT ON AGRICULTURE

Alabama enjoys the mild, humid climate common to the Southeastern United States. However, the distance from the northern to southern ends of the state combined with a change in altitude of several hundred feet causes considerable climate variation. The state lies in a region heavily influenced by tropical currents off the Gulf of Mexico. This proximity to the Gulf has a moderating effect on extremes of temperature and ensures an abundance of moisture in most years.

#### Temperature

Subfreezing temperatures, while not uncommon, are usually of short duration. In the northern sections, the average minimum and maximum recorded temperatures are 30 and 90 degrees occurring in January and July, respectively. In the southern sections of the state, the average temperatures are: January, 37 degrees; and July, 92 degrees. The frost-free period varies in length from about 200 days in the northern section to about 300 days near the Gulf Coast. Figure 4-16, shows the average annual temperatures across Alabama.

#### Precipitation

Average annual precipitation values for the entire state are shown in Figure 4-17. The state's moderate to heavy annual rainfall is uniformly distributed throughout most of the year as shown in Figure 4-18. The winter rainy season begins in December and continues through March, with February and March the wettest months. This wet period is usually followed by a secondary dry period during April and May. Short duration - high intensity summer thundershowers which occur in July and August result in highly erosive rainfall-runoff. The driest months of the year are October and November.

#### Impact on Agriculture

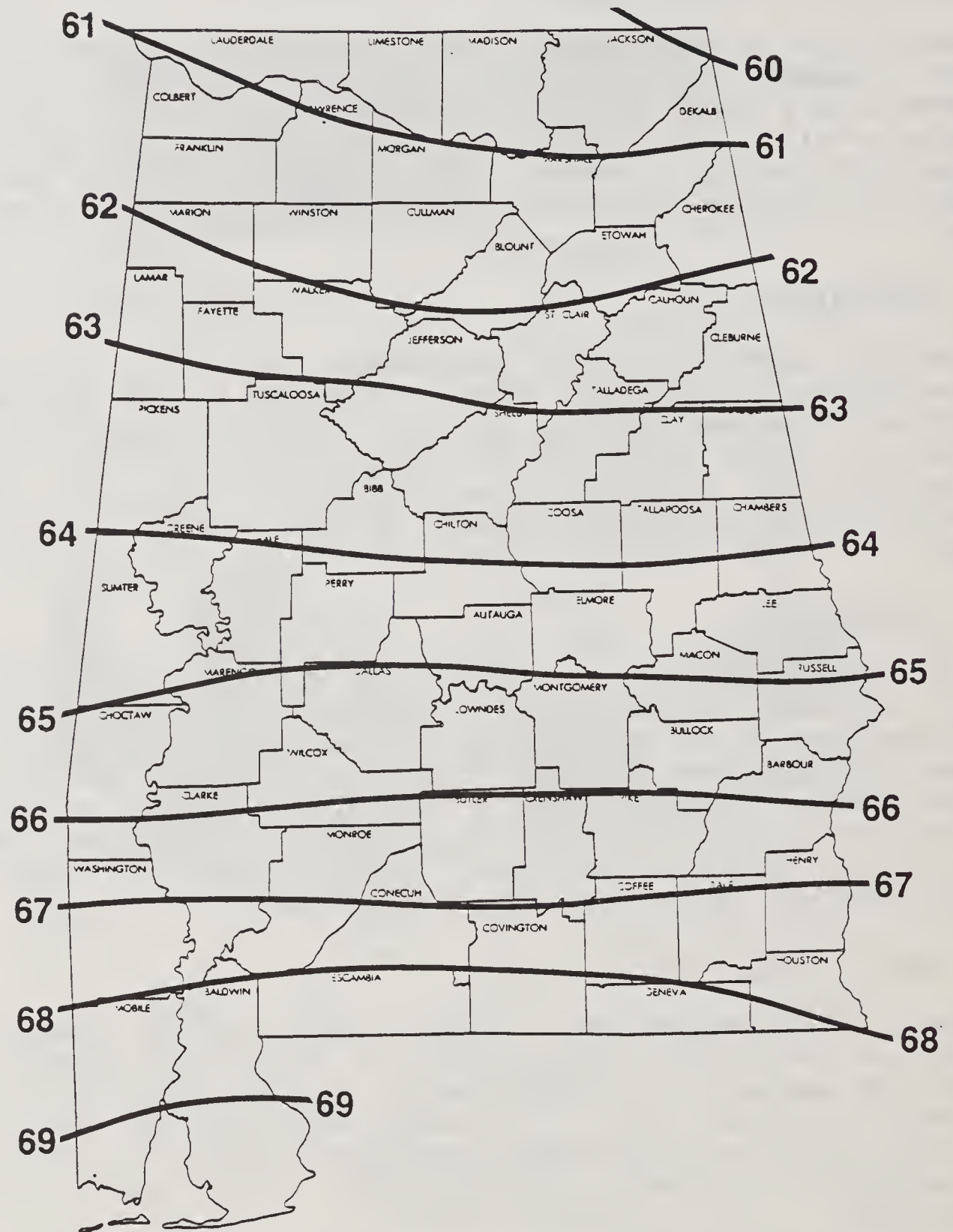
Alabama's climatic conditions represent a great asset to Alabama agriculture. Temperature and rainfall provide conditions suitable for a large variety of field crops such as corn, cotton, peanuts, soybeans, grain sorghum, and wheat; and several vegetable crops. The average temperature and rainfall provide conditions which favor good crop yields over 50 percent of the time. However, the variability of climatic conditions result in less than optimum crop yields in most years.

A study of rainfall records for the period 1899 through 1980 shows the wettest year to be 1961, with 76 inches of rainfall. The next wettest year was 1929 with an annual total of 71 inches. Years of extreme drought have been 1954, 1904, and 1952 with annual rainfall totals of 36 inches, 38 inches and 42 inches, respectively. In years of extreme wetness or drought, agriculture suffers extensive crop losses resulting from soil moisture imbalance, temperature extremes, and flooding. Droughts such as 1954-55 result in long-term moisture imbalance and large crop losses. Considerable crop losses also occur due to seasonal droughts or wet cycles, in years when annual rainfall and temperature are near normal.



Figure 4-16

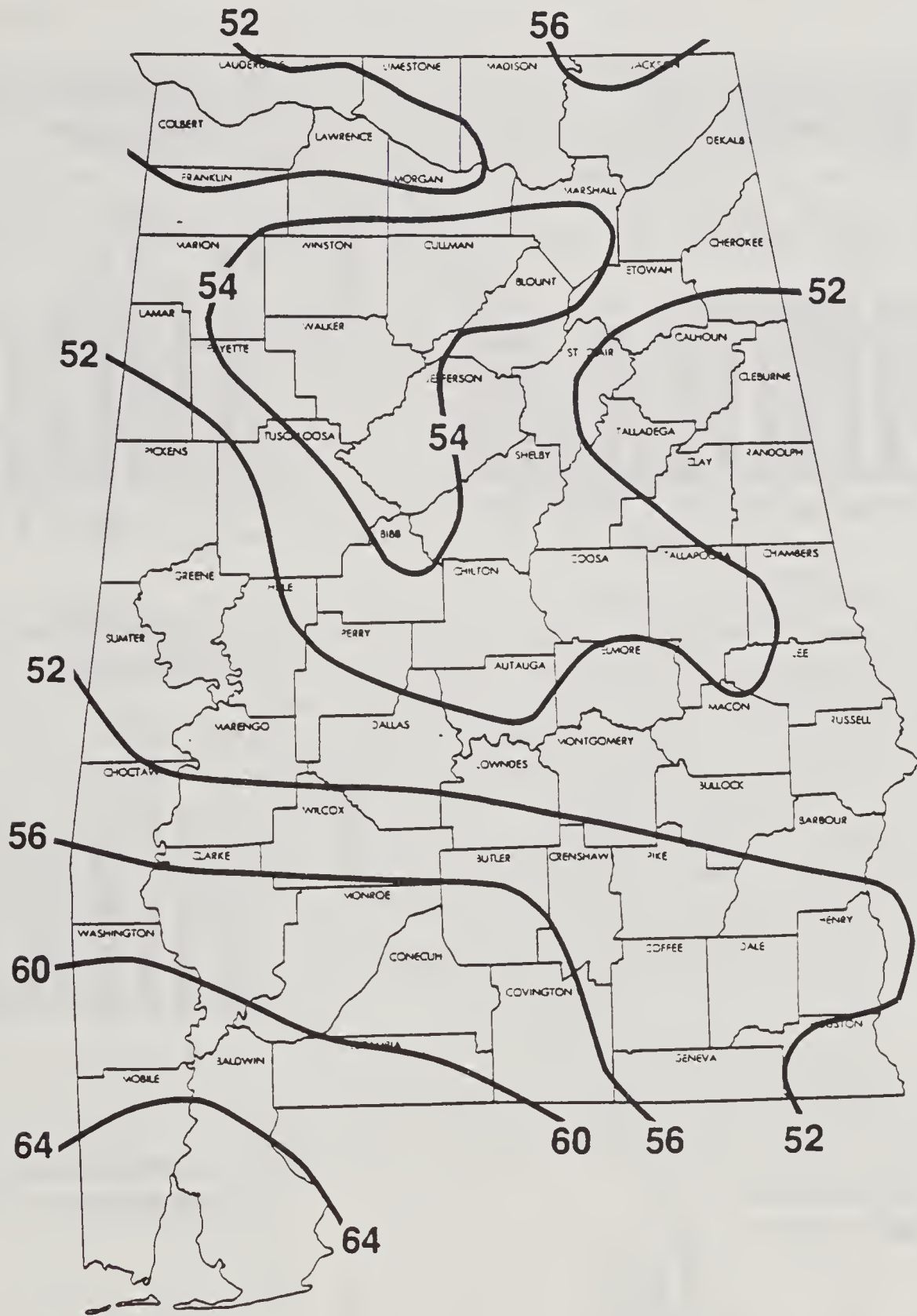
# Average Annual Temperature (°F)



Source: USDA-SCS, Auburn, AL and  
NOAA Environmental Data and Information Service, 1931-1970 Data

Figure 4-17

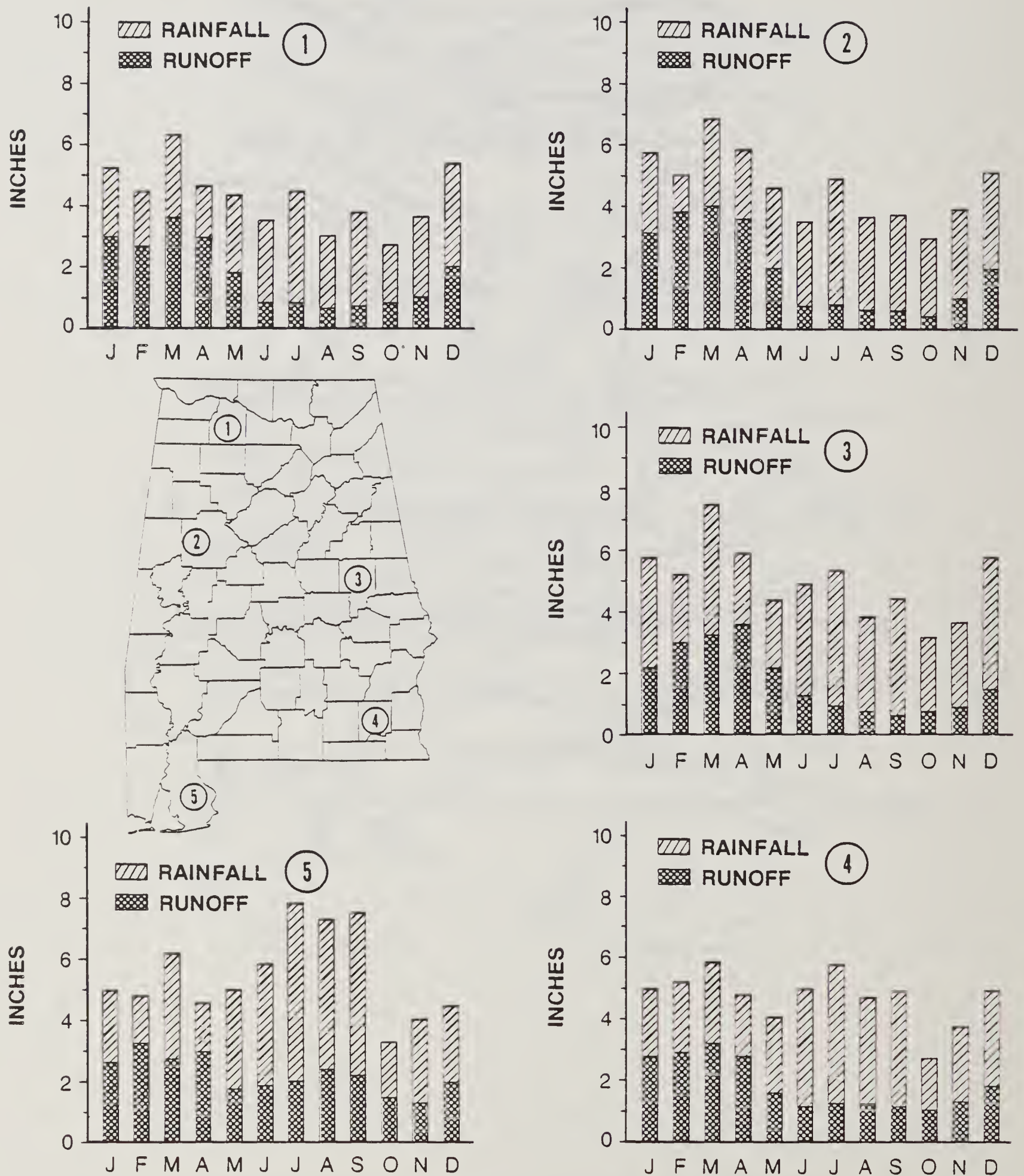
# Average Annual Precipitation (Inches)



Source: USDA-SCS, Auburn, AL and  
NOAA Environmental Data and Information Service, 1931-1970 Data

Figure 4-18

# Normal Monthly Precipitation & Runoff for Selected Locations In Alabama



Sources: Climatology of the U.S. No. 81 NOAA, pp. 4-5.

Surface Water Supply Records of USGS, 1922-1984.



## WATER AVAILABILITY

### Surface Water

Streamflow records of the U.S. Geological Survey indicate total discharge from all rivers within the conterminous United States averages 1,100 billion gallons per day (bgd). Total discharge of all streams flowing through Alabama or along its borders averages 93 bgd. Alabama's 51,705 square miles of surface area, along with 42,000 square miles of drainage areas in Virginia, North Carolina, Tennessee, Georgia, and Mississippi contribute flow to Alabama's streams.

Alabama's 93 bgd total water resource represents the average water available and does not reflect the dependable water supply due to the large variability of streamflow which occurs throughout the year. Based on U.S. Geological Survey records and analysis of nonregulated and regulated streams, median streamflow, approximately 60 percent of average streamflow, is considered to be the annual dependable water supply from flowing streams. The state's median streamflow, 52 bgd, is distributed in the seven USGS hydrologic subregions which comprise Alabama as shown in Table 4-24, and Figure 4-14.

Agricultural irrigation, which requires the most water during lowest streamflow periods cannot rely on the annual dependable supply to fulfill irrigation needs. During the lowest streamflow periods, only 10 to 20 percent of median streamflow is available. In some streams the use of water for irrigation at this stage of flow would damage or destroy instream life. Therefore, water users should consider off-stream water storage in small reservoirs or ponds when irrigation use would irreparably damage the stream ecology. There is potential for development of numerous small reservoirs which could provide storage of 4.3 million acre feet of water to irrigate 2.8 million acres of land. Figure 4-19 indicates those areas of the state with the greatest potential for irrigation water storage. The southern portion of the state has the greatest potential for reservoir development due to site availability in agricultural land areas suitable for irrigation.

In 1982, Alabama had about 141,300 acres of small water bodies less than 40 acres in size, and 170,300 acres of perennial streams less than 660 feet wide, as shown in Table 4-25. A comparison of water area with total area by MLRA's indicates that small water bodies and perennial streams are about equally distributed throughout the state.

Table 4-24  
Alabama's Dependable Water Supply

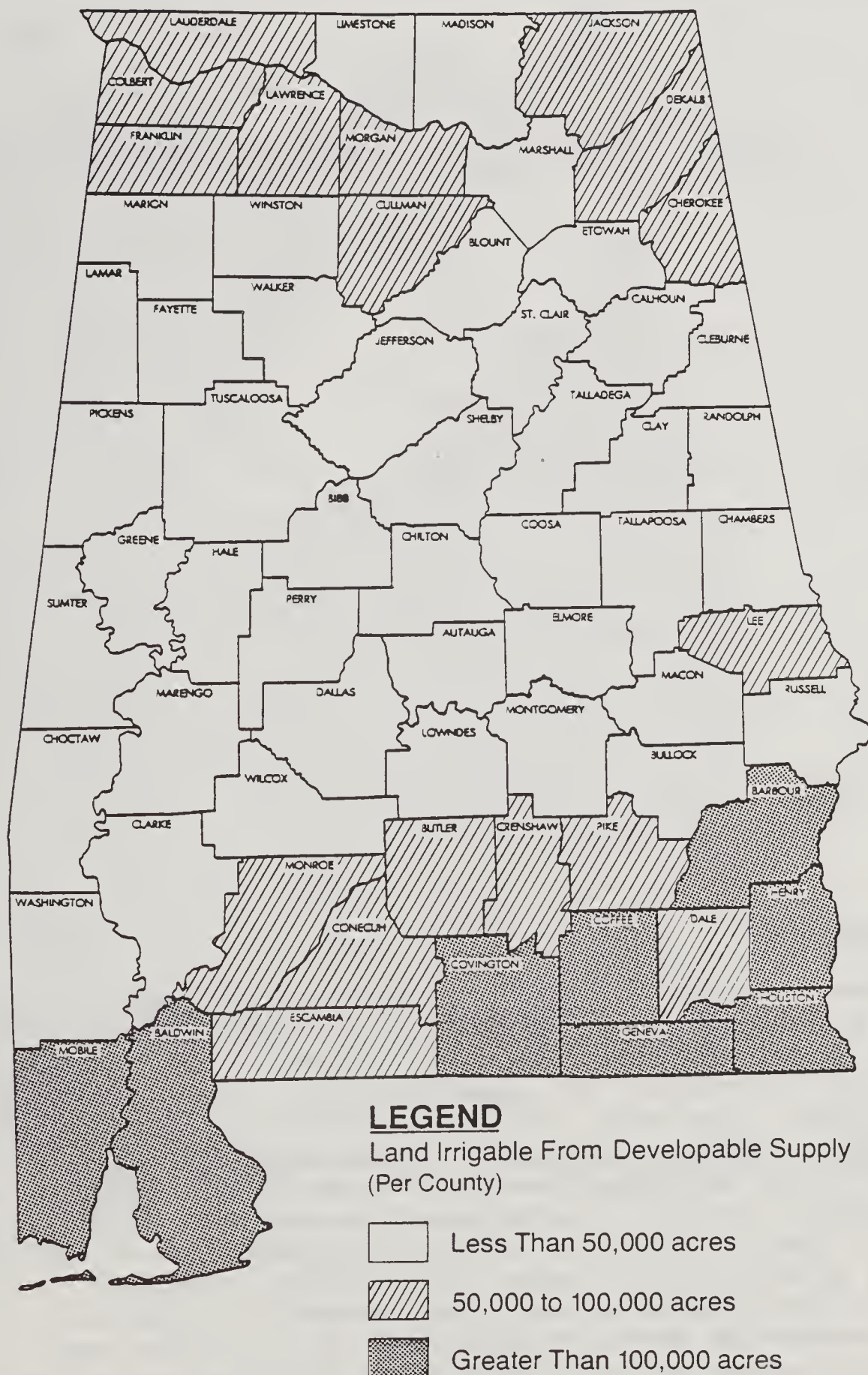
Hydrologic Subregion	Basin Name	Total	Surface Water	Ground Water
-----Billion Gallons Per Day-----				
0313	Apalachicola	3.750	2.750 <sup>1/</sup>	1.000
0314	Choctawhatchee - Escambia	7.508	5.050 <sup>1/</sup>	2.458
0315	Alabama	18.043	12.300	5.743
0316	Mobile - Tombigbee	12.437	8.600	3.837
0317	Pascagoula	0.661	0.300	0.361
0602	Middle Tennessee-Hiwassee	.006	0.005	0.001
0603	Middle Tennessee - Elk	24.810	23.000	1.810
State Total		67.215	52.005	15.210

<sup>1/</sup> For the Chattahoochee River in 0313 and the Perdido River in 0314, only one half of the median flow has been included since these streams form borders with other states.

Sources: Surface Water Publications of U.S. Geological Survey and  
Ground Water Publications of Geological Survey of Alabama

Figure 4-19

## Potential Surface Water Storage In Areas with Agricultural Land Suitable for Irrigation



Source: USDA-SCS, Auburn, AL



Table 4-25

ALABAMA'S SMALL WATER BODIES AND SMALL PERENNIAL STREAMS IN 1982, BY MLRA.

MLRA	WATER BODIES			PERENNIAL STREAMS			TOTAL SMALL WATER AREA
	<2 ACRES	2 - 40 ACRES	TOTAL	< 66 FEET WIDE	66-660 FT WIDE	TOTAL	
				1,000 ACRES			
122	0.6	0.3	0.9	0.9	1.2	2.1	3.0
128	5.0	9.2	14.2	7.5	8.4	15.9	30.1
129/125	12.4	9.9	22.3	10.2	11.3	21.5	43.8
133A/152A	17.3	61.5	78.8	50.6	56.1	106.7	185.5
135	3.8	14.8	18.6	5.9	2.1	8.0	26.6
136	2.0	4.5	6.5	8.9	7.2	16.1	22.6
STATE TOTAL	41.1	100.2	141.3	84.0	86.3	170.3	311.6

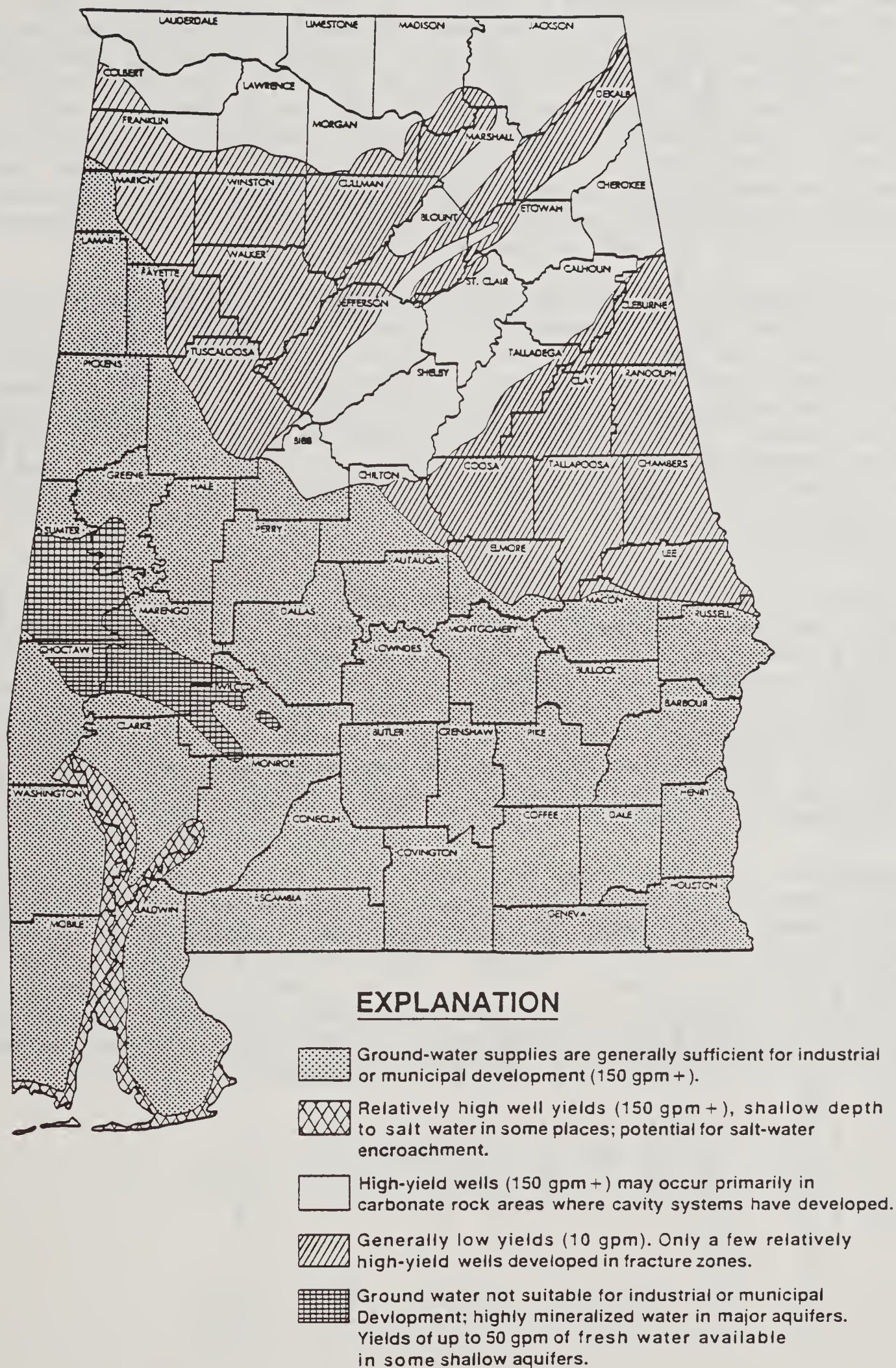
SOURCE: 1982 NRI

Ground Water

In addition to Alabama's generally abundant surface water resources, ground water is a principal source for water in the state. Across Alabama, an estimated 10 inches of the state's average annual 52 inches of precipitation infiltrates into the soil and passes beyond the root zone to recharge ground water supplies. Throughout the state, the availability of ground water varies considerably. Alabama's dependable ground water supply totals 15 bgd as estimated by the Geological Survey of Alabama (GSA). Since surface and ground water supplies interact, utilization of the available supply of one source (surface or ground water) can result in some depletion of the other source. Alabama's dependable ground water supply occurs throughout the state's seven hydrologic subregions as shown in Table 4-24 and Figure 4-18. Ground water distribution is not directly proportional to the surface area of these subregions. The depth of the aquifer below ground surface and the structure of water bearing formations have significant effects on water volumes and availability. The potential yields of wells developed in different sections of the state are shown in Figure 4-20.

Figure 4-20

## Potential Yield of Significant Aquifers in Alabama



Source: Water in Alabama, 1982 Water Year, Circular 122A, Geological Survey of Alabama, p. 12



## WATER USE

Alabama's water resources play a key role in the life of its citizens. In 1982, the state's total water withdrawal use was 8,664 million gallons per day (mgd) according to the Geological Survey of Alabama. Electric power generation accounted for 6,620 mgd (76 percent) of this use, industrial/commercial 1,284 mgd (15 percent), public water supply 574 mgd (7 percent), and agriculture, mining, and self-supplied domestic comprised the remaining 186 mgd (2 percent). Ninety-seven percent of the 8,664 mgd used in 1982 was taken from surface water sources and 3 percent from ground water. Table 4-26 shows water source and principal use for the state's seven hydrologic subregions. Table 4-27 provides the same information by counties.

Seventy-six percent of Alabama's total withdrawal use in 1982 was for electric power generation. Eleven thermoelectric facilities and three nuclear facilities withdraw water for this purpose. Browns Ferry nuclear facility in Limestone County withdraws 2,363 mgd or 36 percent of the total. Almost 100 percent of the water withdrawn for electric power generation is returned to the stream for reuse. The state's second and third largest withdrawal users are industrial/commercial and public water supply utilizing 15 percent and 7 percent respectively. Domestic use of public water in 1982 accounted for 355 mgd or 108 gallons per capita per day (gpcd) based on Alabama Department of Public Health records.

Agriculture is one of the state's smaller water users with 129 mgd, or 1.5 percent of the total withdrawal. Water, however, is essential to agriculture. Practically every aspect of agriculture in Alabama requires water. Livestock use, 55 mgd, irrigation use, 40 mgd, and catfish production, 34 mgd, constitute the specific water uses in agriculture. Tables 4-28 and 4-29 indicate that in 1982, seventy percent of Alabama's irrigation water came from surface water supplies, with ground water providing the remaining 30 percent. For all agricultural uses, surface water provided 87 mgd (67 percent) and ground water 42 mgd (33 percent).

Twelve counties in Alabama used 45 percent of the total agricultural water used in 1982. Eight of the state's 12 largest agricultural water use counties are in south Alabama, with irrigation the primary use. Farmers in Houston County used 6.29 mgd for irrigation. Cullman County farmers required 6.36 mgd for livestock production, primarily poultry. Hale County in West Alabama, the state's largest agricultural water user and largest catfish producer used 9.5 mgd for catfish production. A large part of agriculture's 129 mgd withdrawn is consumed and not returned to the source for other uses.



Table 4-26  
1982 Withdrawal Use of Water in Alabama By  
Hydrologic Subregion, Water Source, and Principal Use

Hydrologic subregion	1980 population	Combined withdrawals			Categories						
		Total	Ground water	Surface water	Public water systems	Self- supplied industry/ commerce <sup>1</sup>	Agriculture	Self- supplied domestic estimates	Mining <sup>1</sup>	Power generation <sup>2</sup>	
			(percent)	(percent)							
----- Million Gallons Per Day -----											
0313	178,607	172.75	10	90	22.94	51.06	14.30	1.76	0	82.69	
0314	315,768	125.07	38	62	32.14	51.72	29.85	4.26	0	7.10	
0315	1,136,309	1,394.74	7	93	131.18	428.40	26.00	19.74	0.01	789.41	
0316	1,578,770	2,769.81	3	97	280.06	335.60	42.80	12.16	12.38	2,086.81	
0317	33,802	4.06	88	12	2.71	0.01	1.34	0.001	0	-	
0602	200	0.46	42	58	0	0	0.44	0.015	0	-	
0603	646,605	4,197.38	1	99	104.62	416.91	14.10	7.92	0.27	3,653.56	
STATE TOTAL		3,890,061	8,664.27	3	97	573.65	1,283.70	128.83	45.86	12.66	6,619.57

<sup>1</sup> Latest available data is for 1980.

<sup>2</sup> This value does not include in-stream water use by hydroelectric power plants.

SOURCE: Use of Water in Alabama, 1982, Information Series 59c.  
Geological Survey of Alabama, p. 34

Table 4-27

1982 Withdrawal Use of Water in Alabama  
By County, Water Source, and Principal Use

County	1980 population	Combined withdrawals			Categories					
		Total	Ground water		Public water systems	Self-supplied industry/commerce <sup>1</sup>	Agriculture	Self-supplied domestic estimates	Mining <sup>1</sup>	Power generation <sup>2</sup>
			(percent)	Surface water (percent)						
----- Million Gallons Per Day -----										
Autauga	32,259	32.99	16	84	2.95	27.64	1.89	0.51	-	-
Baldwin	78,440	13.71	90	10	7.20	0.63	4.73	1.15	-	-
Barbour	24,756	8.14	42	58	2.71	0.34	4.87	0.22	-	-
Bibb	15,723	2.74	62	38	1.15	0.20	1.17	0.22	-	-
Blount	36,459	6.92	53	47	1.83	1.45	2.04	1.35	0.25	-
Bullock	10,596	1.82	76	24	1.06	0.03	0.63	0.10	-	-
Butler	21,680	2.65	84	16	1.66	0.09	0.55	0.35	-	-
Calhoun	116,936	26.83	74	26	20.14	5.68	0.78	0.23	-	-
Chambers	39,191	20.75	2	98	4.43	15.53	0.47	0.32	-	-
Cherokee	18,760	2.86	36	64	0.57	0.07	1.49	0.73	-	-
Chilton	30,612	4.38	39	61	1.88	0.97	0.84	0.69	-	-
Choctaw	16,839	59.77	3	97	0.41	56.40	2.16	0.80	-	-
Clarke	27,702	31.48	8	92	1.26	27.71	1.87	0.64	-	-
Clay	13,703	2.49	35	65	1.20	0.01	0.70	0.58	-	-
Cleburne	12,595	2.60	36	64	0.34	0.88	0.76	0.62	-	-
Coffee	38,533	10.79	69	31	3.11	2.34	4.65	0.69	-	813.50
Colbert	54,519	1,025.57	3	100	5.76	205.56	0.74	0.006	-	-
Conecuh	15,884	1.68	87	13	0.78	0.01	0.34	0.55	-	-
Coosa	11,377	0.88	54	46	0.27	0.01	0.30	0.33	-	-
Covington	36,850	16.48	37	63	4.12	0.01	4.57	0.68	-	7.10
Crenshaw	14,110	4.52	32	68	0.89	0.01	3.34	0.28	-	-
Cullman	61,642	14.48	19	81	7.04	0.91	6.41	-	0.12	-
Dale	47,821	7.93	82	18	5.70	0.01	1.72	0.50	-	-
Dallas	53,981	31.01	27	73	5.42	22.54	1.69	1.36	-	-
DeKalb	53,658	10.24	42	58	2.94	0.56	4.64	2.10	-	-
Elmore	43,390	4.02	56	44	2.93	0.06	0.63	0.40	-	-
Escambia	38,392	53.47	10	90	3.35	48.78	0.75	0.59	-	-
Etowah	103,057	297.09	1	99	18.80	172.77	0.87	-	-	104.65
Fayette	18,809	2.72	31	69	1.28	0.20	0.20	0.66	0.38	-
Franklin	28,350	3.82	37	63	1.56	0.12	1.13	0.74	0.27	-
Geneva	24,253	6.62	34	66	1.11	0.01	4.85	0.65	-	-
Greene	11,021	248.53	1	99	0.41	0.01	3.52	0.40	-	244.19
Hale	15,604	12.86	36	64	1.63	0.95	9.64	0.64	-	-
Henry	15,302	6.15	36	64	1.23	0.01	4.56	0.35	-	-
Houston	74,632	101.14	16	84	9.95	0.22	6.93	1.35	-	82.69
Jackson	51,407	488.59	3	100	8.27	1.91	0.88	0.89	-	476.64
Jefferson	671,197	148.69	8	92	103.97	35.43	0.45	0.23	4.73	3.88
Lamar	16,453	1.54	91	9	0.80	0.02	0.19	0.53	-	-

Table 4-27 (Continued)

1982 Withdrawal Use of Water in Alabama  
By County, Water Source, and Principal Use

County	1980 population	Combined withdrawals			Categories						
		Total	Ground water		Public water systems	Self- supplied industry/ commerce <sup>1</sup>	Agriculture	Self- supplied domestic estimates	Mining <sup>1</sup>	Power generation <sup>2</sup>	
			(percent)	Surface water (percent)							
----- Million Gallons Per Day -----											
Lauderdale	80,504	11.91	26	74	8.77	1.23	0.70	1.21	-	-	
Lawrence	30,170	35.85	4	96	1.16	32.40	1.44	0.85	-	-	
Lee	76,283	14.74	13	87	7.30	5.36	0.55	1.53	-	-	
Limestone	46,005	2,371.69	3	100	4.98	0.98	1.17	1.14	-	2,363.42	
Lowndes	13,253	2.42	64	36	0.48	0.01	1.53	0.40	-	-	
Macon	26,829	4.47	11	89	3.36	0.01	0.83	0.27	-	-	
Madison	196,966	43.77	41	59	39.71	1.61	1.15	1.30	-	-	
Marengo	25,047	55.50	6	94	1.71	50.35	2.60	0.84	-	-	
Marion	30,041	5.13	41	59	3.28	0.59	0.43	0.73	0.10	-	
Marshall	65,622	46.78	11	89	11.17	32.09	3.40	0.12	-	-	
Mobile	364,379	1,228.96	3	97	134.15	105.52	2.22	0.63	-	986.44	
Monroe	22,651	74.16	6	94	2.12	70.80	0.63	0.61	-	-	
Montgomery	197,038	32.53	40	60	29.55	0.20	1.40	1.38	-	-	
Morgan	90,231	165.50	2	98	22.18	141.01	1.65	0.66	-	-	
Perry	15,012	5.19	53	47	1.73	1.38	1.50	0.58	-	-	
Pickens	21,481	5.38	51	49	1.50	1.33	2.00	0.55	-	-	
Pike	28,050	6.64	66	34	3.01	0.01	2.92	0.70	-	-	
Randolph	20,075	2.71	52	48	0.94	0.01	0.91	0.85	-	-	
Russell	47,356	36.35	5	95	4.82	30.01	0.54	0.98	-	-	
St. Clair	41,205	6.09	79	21	3.78	0.01	1.60	0.70	-	-	
Shelby	66,298	694.54	1	99	7.65	0.31	1.21	0.60	0.01	684.76	
Sumter	16,908	4.73	24	76	1.46	0.11	2.73	0.43	-	-	
Talladega	73,826	110.32	6	94	7.71	100.17	0.68	1.76	-	-	
Tallapoosa	38,676	13.24	3	97	7.40	5.16	0.34	0.34	-	-	
Tuscaloosa	137,473	37.91	7	93	15.48	17.84	2.42	1.25	0.92	-	
Walker	68,660	853.40	3	100	5.80	0.01	0.91	1.00	5.88	839.80	
Washington	16,821	56.48	10	90	0.62	41.22	1.42	0.72	-	12.50	
Wilcox	14,755	15.77	8	92	1.05	13.70	0.41	0.61	-	-	
Winston	21,953	3.16	57	43	0.70	0.19	1.59	0.68	-	-	
STATE TOTAL		3,890,061	8,664.27	3	97	573.65	1,283.70	128.83	45.86	12.66	6,619.57

<sup>1</sup> Latest available data is for 1980.<sup>2</sup> This value does not include in-stream water use by hydroelectric power plants.<sup>3</sup> Less than 1 percent.

SOURCE: Use of Water in Alabama, 1982, Information Series 59c.  
Geological Survey of Alabama, pp. 32-33



TABLE 4-28

1982 Agricultural Water Use in Alabama  
By County, Water Source, and Principal Use

County	Total withdrawals		Irrigation water use		Acres irrigated	Non-irrigation use <sup>1</sup> (livestock <sup>2</sup> )		
	Total	Ground water	Surface water	Ground water			Surface water	
----- Million Gallons Per Day -----								
Autauga	1.89	0.89	1.00	0.60	0.47	0.13	355	1.29
Baldwin	4.73	3.92	0.81	4.09	3.66	0.43	9,068	0.64
Barbour	4.87	0.52	4.35	4.10	0.21	3.89	8,470	0.77
Bibb	1.17	0.31	0.86	0.08	-	0.08	280	1.09
Blount	2.04	0.66	1.38	0.39	-	0.39	700	1.65
Bullock	0.63	0.22	0.41	0.07	-	0.07	160	0.56
Butler	0.55	0.21	0.34	0.04	-	0.04	100	0.51
Calhoun	0.78	0.30	0.48	0.05	-	0.05	120	0.73
Chambers	0.47	0.14	0.33	0.13	-	0.13	185	0.34
Cherokee	1.49	0.16	1.33	1.10	-	1.10	2,750	0.39
Chilton	0.84	0.33	0.51	0.08	0.03	0.05	180	0.76
Choctaw	2.16	0.60	1.56	-	-	-	-	2.16
Clarke	1.87	0.52	1.35	-	-	-	-	1.87
Clay	0.70	0.28	0.42	-	-	-	-	0.70
Cleburne	0.76	0.30	0.46	-	-	-	-	0.76
Coffee	4.65	1.26	3.39	2.33	0.33	2.00	6,000	2.32
Colbert	0.74	0.25	0.49	0.12	-	0.12	500	0.62
Conecuh	0.34	0.12	0.22	0.02	-	0.02	50	0.32
Coosa	0.30	0.11	0.19	0.01	-	0.01	40	0.29
Covington	4.57	1.25	3.32	0.23	-	0.23	516	4.34
Crenshaw	3.34	0.27	3.07	2.68	-	2.68	6,000	0.66
Cullman	6.41	2.52	3.89	0.05	-	0.05	150	6.36
Dale	1.72	0.31	1.41	1.32	0.13	1.19	3,050	0.40
Dallas	1.69	0.51	1.18	0.10	-	0.10	236	1.59
DeKalb	4.64	1.71	2.93	0.36	-	0.36	1,200	4.28
Elmore	0.63	0.19	0.44	0.12	-	0.12	260	0.51
Escambia	0.75	0.45	0.30	0.49	0.35	0.14	1,370	0.26
Etowah	0.87	0.33	0.54	0.05	-	0.05	110	0.82
Fayette	0.20	0.08	0.12	-	-	-	-	0.20
Franklin	1.13	0.42	0.71	0.09	-	0.09	300	1.04
Geneva	4.85	0.47	4.38	3.90	0.08	3.82	10,000	0.95
Greene	3.52	0.93	2.59	0.12	-	0.12	250	3.40
Hale	9.64	2.36	7.28	0.11	-	0.11	200	9.53
Henry	4.56	0.62	3.94	3.94	0.39	3.55	9,400	0.62
Houston	6.93	4.47	2.46	6.29	4.21	2.08	12,600	0.64
Jackson	0.88	0.34	0.54	0.013	0.003	0.01	45	0.87
Jefferson	0.45	0.23	0.22	0.07	0.07	-	200	0.38
Lamar	0.19	0.07	0.12	-	-	-	-	0.19
Lauderdale	0.70	0.28	0.42	0.01	-	0.01	20	0.69
Lawrence	1.44	0.57	0.87	0.01	-	0.01	12	1.43
Lee	0.55	0.14	0.41	0.15	-	0.15	350	0.40
Limestone	1.17	0.39	0.78	0.19	0.06	0.13	500	0.98
Lowndes	1.53	0.66	0.87	0.19	0.19	-	500	1.34
Macon	0.83	0.14	0.69	0.48	-	0.48	900	0.35
Madison	1.15	0.40	0.75	0.06	0.03	0.03	200	1.09
Marengo	2.60	0.70	1.90	0.002	-	0.002	10	2.60

TABLE 4-28 (Continued)

1982 Agricultural Water Use in Alabama  
By County, Water Source, and Principal Use

County	Total withdrawals			Irrigation water use			Acres irrigated	Non-irrigation use <sup>1</sup> (livestock <sup>2</sup> )
	Total	Ground water	Surface water	Total	Ground water	Surface water		
----- Million Gallons Per Day -----								
Marion	0.43	0.18	0.25	0.03	0.02	0.01	33	0.40
Marshall	3.40	1.28	2.12	0.03	-	0.03	80	3.37
Mobile	2.22	1.15	1.07	0.84	0.70	0.14	1,890	1.38
Monroe	0.63	0.29	0.34	0.26	0.13	0.13	545	0.37
Montgomery	1.40	0.72	0.68	0.39	0.32	0.07	652	1.01
Morgan	1.65	0.58	1.07	0.03	-	0.03	75	1.62
Perry	1.50	0.42	1.08	0.17	-	0.17	275	1.33
Pickens	2.00	0.68	1.32	0.03	0.03	-	40	1.97
Pike	2.92	0.64	2.28	2.08	0.31	1.77	5,006	0.84
Randolph	0.91	0.33	0.58	0.10	-	0.10	235	0.81
Russell	0.54	0.12	0.42	0.19	-	0.19	426	0.35
St. Clair	1.60	0.34	1.26	0.75	-	0.75	1,500	0.85
Shelby	1.21	0.27	0.94	0.66	0.05	0.61	1,775	0.55
Sumter	2.73	0.71	2.02	0.23	-	0.23	520	2.50
Talladega	0.68	0.27	0.41	-	-	-	-	0.68
Tallapoosa	0.34	0.09	0.25	0.09	-	0.09	120	0.25
Tuscaloosa	2.42	0.69	1.73	0.04	0.02	0.02	100	2.38
Walker	0.91	0.36	0.55	-	-	-	-	0.91
Washington	1.42	0.44	0.98	-	-	-	-	1.42
Wilcox	0.41	0.17	0.24	-	-	-	-	0.41
Winston	1.59	0.63	0.96	-	-	-	-	1.59
STATE TOTAL	128.83	42.27	86.56	40.15	11.79	28.36	90,609	88.68

<sup>1</sup> 1981 data.<sup>2</sup> Includes catfish.

SOURCE: Use of Water in Alabama, 1982, Information Series 59c.  
Geological Survey of Alabama, pp. 17-18

TABLE 4-29

1982 Water Withdrawals for Agricultural Use in Alabama  
By Hydrologic Subregion, Water Source, and Principal Use

Hydrologic subregion	Total withdrawals		Irrigation use			Acres irrigated	Non-irrigation	
	Total	Ground water	Surface water	Total	Ground water		Surface water	use <sup>1</sup> (livestock <sup>2</sup> )
----- Million Gallons Per Day -----								
0313	14.30	5.30	9.00	11.39	4.24	7.15	25,921	2.91
0314	29.85	7.63	22.22	18.02	3.44	14.58	42,802	11.83
0315	26.00	8.64	17.36	6.49	1.50	4.99	10,873	19.51
0316	42.80	14.28	28.52	2.68	1.61	1.07	6,791	40.12
0317	1.34	0.87	0.47	0.84	0.70	0.14	1,890	0.50
0602	0.44	0.18	0.26	0	0	0	0	0.44
0603	14.10	5.37	8.73	0.73	0.30	0.43	2,332	13.37
STATE TOTAL	128.83	42.27	86.56	40.15	11.79	28.36	90,609	88.68

<sup>1</sup> 1981 data.

<sup>2</sup> Includes catfish.

SOURCE: Use of Water in Alabama, 1982, Information Series 59c.  
Geological Survey of Alabama, p. 18



## CHAPTER 5

### RESOURCE CONDITIONS AND TREATMENT NEEDS

#### LAND

##### EROSION

The 1982 NRI indicates that Alabama has the sixth highest rate of erosion on cropland in the nation. Alabama's average cropland erosion rate is 7.1 tons per acre per year (Table 5-1), compared to the national average of 4.4 tons per acre per year.

Each soil has a tolerable erosion rate ("T") that will permit sustained agricultural use while retaining productive capacity. "T", expressed in tons per acre per year, depends on the recuperative ability of the particular soil and on the original depth of the soil. The "T" in Alabama varies from 1 to 5 tons per acre per year. Alabama had 3.4 million acres of rural land eroding at excessive rates in 1982, and 2.6 million of those are cropland (Table 5-2).

The seriousness of the erosion problem has not been fully recognized since damage to soil productivity has been masked by production gains accomplished through plant variety improvement and other agricultural technology. In addition, Alabama farmers, like many others throughout the United States, have continued to bring new land into cultivation, which has led to a somewhat calloused approach to stewardship of the land.

Erosion of topsoil and reduction of productive capacity amounts to mining of one of our most vital resources. Topsoil is a dynamic complex of minerals, air, water, and organic matter, including decomposing plant and animal material as well as living fungi, bacteria and other organisms. Productive soil cannot be repaired by simply replacing either organic matter or mineral plant food elements. The chemical and physical process by which soil becomes a fertile, water holding, plant-feeding entity, requires many years. Therefore, soils are only slowly renewable. Generally, if agricultural use continues on a damaged soil, the soil loses its productive capacity. Alabama's agricultural soils have lost half of their topsoil in 100 years. The remaining soil is less fertile, less productive, less erosion resistant, and could be lost in much less time.

Water-caused erosion, mostly sheet and rill erosion, is the main problem affecting the soil resources of the state. Wind-caused erosion is limited to areas in the heavily cropped sections of the state during one or two months of the year and may not occur every year.

Sheet and rill erosion was estimated by use of a model known as the Universal Soil Loss Equation (USLE). The equation accounts for the effect of soil erodibility, rainfall intensity and energy, slope length and gradient, crop and management factors, and conservation practices that reduce erosion.

Table 5-1

SHEET AND RILL EROSION ON NONFEDERAL RURAL LAND (EXCEPT SMALL BUILT-UP) BY MLRA, 1982

MLRA	CROPLAND			PASTURELAND			FORESTLAND			MINDR USES			TOTAL		
	1,000 TONS	1,000 ACRES	TONS/AC	1,000 TONS	1,000 ACRES	TONS/AC	1,000 TONS	1,000 ACRES	TONS/AC	1,000 TONS	1,000 ACRES	TONS/AC	1,000 TONS	1,000 ACRES	TONS/AC
122	2150.2	215.2	9.99	63.8	99.4	0.64	31.5	133.2	0.24	18.5	5.9	3.14	2264.0	453.7	4.99
128	6372.8	813.0	7.84	261.1	536.1	0.49	512.0	1962.8	0.26	1473.8	82.2	17.93	8619.7	3394.1	2.54
129/125	4104.4	504.2	8.14	425.3	624.3	0.68	2417.6	2903.7	0.83	36822.0	149.9	245.64	43769.3	4182.1	10.47
133A/152A	15408.0	2407.5	6.40	1056.6	1626.2	0.65	7205.5	12491.5	0.58	5505.3	278.0	19.80	29175.4	16803.2	1.74
135	3698.4	481.2	7.69	725.4	656.1	1.11	726.2	872.2	0.83	119.7	18.2	6.58	5269.7	2027.7	2.60
136	449.3	89.2	5.04	158.2	274.5	0.58	1117.5	2269.9	0.49	57.3	22.3	2.57	1782.3	2655.9	0.67
STATE TOTAL	32183.1	4510.3	7.14	2690.4	3816.6	0.70	12010.3	20633.3	0.58	43996.6	556.5	79.06	90880.4	29516.7	3.08

SOURCE: 1982 NRI

Table 5-2

SHEET AND RILL EROSION IN RELATION TO T VALUE ON NON-FEDERAL RURAL LAND  
(EXCEPT SMALL BUILT-UP) BY MLRA, 1982

	<= T			>T AND <=2T			>2T			TOTAL		
	1,000 TONS	1,000 ACRES	TONS/AC	1,000 TONS	1,000 ACRES	TONS/AC	1,000 TONS	1,000 ACRES	TONS/AC	1,000 TONS	1,000 ACRES	TONS/AC
122	206.5	283.2	0.7	331.1	55.7	5.9	1726.4	114.8	15.0	2264.0	453.7	5.0
128	1450.2	2833.0	0.5	1610.9	261.9	6.2	5558.6	299.2	18.6	8619.7	3394.1	2.5
129/125	1331.1	3593.7	0.4	735.5	186.8	3.9	41702.7	401.6	103.8	43769.3	4182.1	10.5
133A/152A	6486.8	15210.6	0.4	5900.5	915.8	6.4	16788.1	676.8	24.8	29175.4	16803.2	1.7
135	1014.3	1640.3	0.6	959.8	176.4	5.4	3295.6	211.0	15.6	5269.7	2027.7	2.6
136	719.1	2548.6	0.3	213.8	49.9	4.3	849.4	57.4	14.8	1782.3	2655.9	0.7
STATE TOTAL	11208.0	26109.4	0.4	9751.6	1646.5	5.9	69920.8	1760.8	39.7	90880.4	29516.7	3.1

SOURCE: 1982 NRI



Alabama's potential erosion is higher than in most states because of the intense rain storms inherent to the Gulf and Atlantic Coastal areas of the South. Rainfall energy (erosive rainfall during the cropping year) is about twice as great in Alabama as it is in the Corn Belt. Our humid, warm weather produces lush, early growth that tends to reduce the erosive effects of heavy rainfall, however, the effect of rainfall energy more than offsets the advantages of early cover produced by crops.

## SEVERITY OF EROSION

### Sheet and Rill Erosion

The difference in erosion caused by land use is illustrated in Figure 5-1. For example, cropland comprises 15 percent of the rural land and produces 35 percent of the sheet and rill erosion. Erosion from minor use is about 44 million tons from 556,500 acres (Table 5-1), but 95 percent is from 145,000 acres of mined land (see also Table 5-14).

Table 5-4, illustrates how much cropland is eroding at rates that damage the productive capacity of the land. Land eroding at rates "less than or equal to T", is adequately protected. When the erosion rate is "greater than T and less than or equal to twice T", the land is experiencing moderate damage. Land eroding "greater than twice T", is recognized as having serious erosion which is very damaging to the resource base. Fifty-seven percent of all cropland is eroding excessively. On Sand Mountain (MLRA 129/125), 75 percent of the cropland acres have erosion that exceeds the "T" rate.

Subclass "e" lands in all capability classes are eroding at the highest rates (Table 5-5). Figure 5-2 shows acres eroding excessively compared to the acreage adequately protected (erosion greater than/less than "T"). Among the major cropland areas, only the Coastal Plain-Gulf Coast Flatwoods (MLRA 133A/152A) has a significant percentage of erodible cropland adequately protected. Figure 5-3 displays tonnage of erosion occurring on subclass "e" croplands, illustrating the obvious need for intensification of conservation effort on those soils eroding above 2T in each MLRA.

### Ephemeral Gully Erosion

Ephemeral gully erosion was not directly inventoried during the 1982 NRI. However, the data for sloping, cultivated crop fields without water disposal systems has been interpreted to estimate ephemeral gullying (Table 5-3).

Erosion from ephemeral gullies was estimated to be 8,369,200 tons in 1982. About 80,000 acres of sloping cropland, without adequate water disposal systems are experiencing soil losses averaging 105 tons per acre per year from ephemeral gullies.

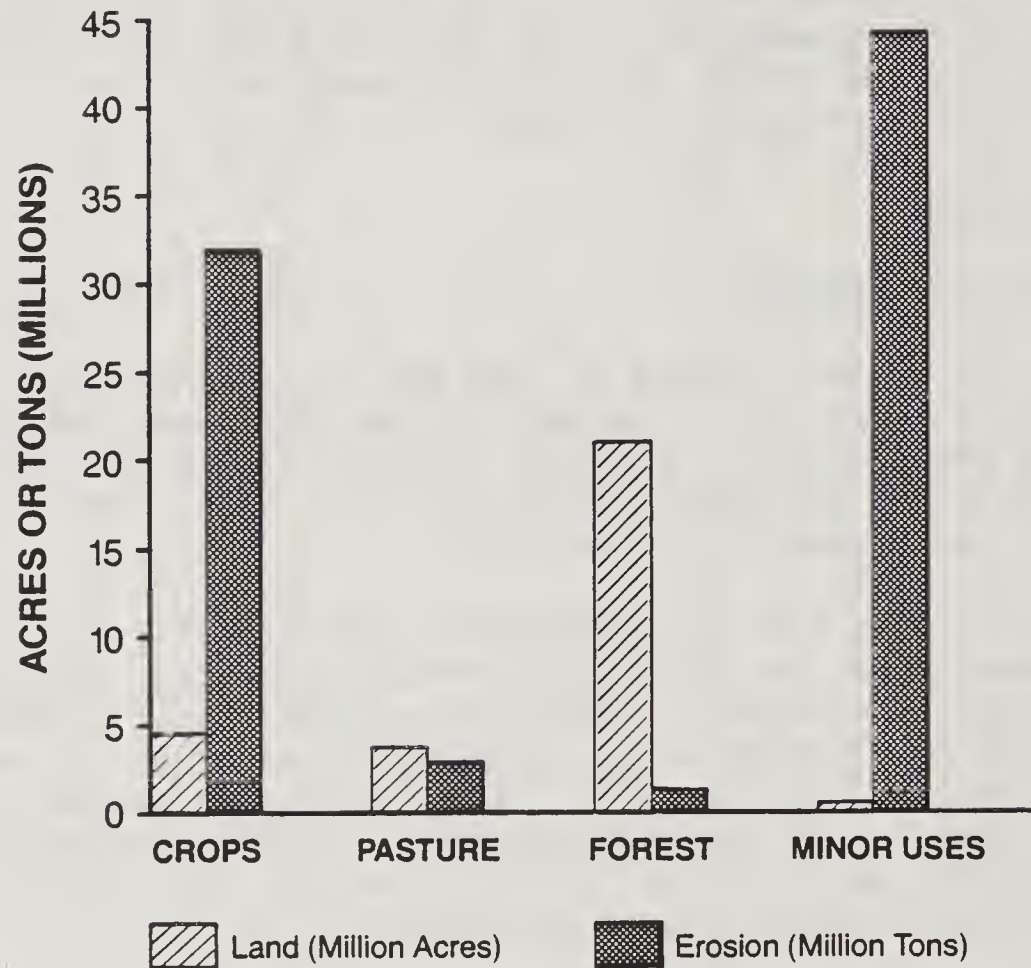
### Row Crop Erosion (Sheet and Rill)

The high erosion rates illustrated in Table 5-6, reflect the intensive land preparation and soil disturbance inherent in conventional row cropping. Row crop erosion in 1982 averaged 8.1 tons per acre per year from 3,608,800 acres. Table 5-7 analyzes row crop erosion by MLRA's. The Coastal Plain-Gulf Coast Flatwoods (MLRA's 133A/152A) has both the lowest row crop erosion rate and the lowest percentage of row cropped land with excessive erosion.



Figure 5-1

### Nonfederal Rural Land Use and Erosion, 1982 (Sheet and Rill Erosion)



Source: 1982 NRI

Table 5-3

### Acreage and Erosion of Cropland Ephemeral Gullies, 1982

MLRA	Land Capability Classes II, III, and IV		Land Capability Classes VI and VII		Totals	
	Acres	1000 Tons	Acres	1000 Tons	Acres	1000 Tons
122	4,100	557.8	100	18.1	4,200	575.9
128	18,300	1,938.7	200	34.1	18,500	1,972.8
129/125	9,000	1,013.2	200	38.5	9,200	1,051.7
133A/152A	31,000	2,653.0	2,200	555.9	34,100	3,208.9
135	12,300	1,415.4	300	36.0	12,600	1,451.4
136	900	75.8	200	32.7	1,100	108.5
Total	76,500	7,653.9	3,200	715.3	79,700	8369.2

Source: 1982 NRI

Table 5-4

SHEET AND RILL EROSION ON CROPLAND IN RELATION TO T VALUE BY MLRA, 1982

MLRA	<= T			>T AND <=2T			>2T			TOTAL		
	1,000 TONS	1,000 ACRES	TONS/AC	1,000 TONS	1,000 ACRES	TONS/AC	1,000 TONS	1,000 ACRES	TONS/AC	1,000 TONS	1,000 ACRES	TONS/AC
122	116.7	48.0	2.43	324.6	54.6	5.95	1708.9	112.6	15.18	2150.2	215.2	9.99
128	774.2	317.5	2.44	1540.8	234.0	6.58	4057.8	261.5	15.52	6372.8	813.0	7.84
129/125	170.9	128.1	1.33	523.3	113.9	4.59	3410.2	262.2	13.01	4104.4	504.2	8.14
133A/152A	2893.3	1209.4	2.39	4998.8	747.1	6.69	7515.9	451.0	16.66	15408.0	2407.5	6.40
135	469.5	197.5	2.38	758.6	127.1	5.97	2470.3	156.6	15.77	3698.4	481.2	7.69
136	87.1	51.0	1.71	121.6	21.0	5.79	240.6	17.2	13.99	449.3	89.2	5.04
STATE TOTAL	4511.7	1951.5	2.31	8267.7	1297.7	6.37	19403.7	1261.1	15.39	32183.1	4510.3	7.14

SOURCE: 1982 NRI

Table 5-5

SHEET AND RILL EROSION ON CROPLAND IN RELATION TO T VALUE BY LAND  
CAPABILITY CLASS AND SUBCLASS. 1982

CLASS/ SUBCLASS	<= T					>T AND <=2T					>2T					TOTAL		
	1,000 TONS	1,000 ACRES	TONS/AC	1,000 TONS	1,000 ACRES	TONS/AC	1,000 TONS	1,000 ACRES	TONS/AC	1,000 TONS	1,000 ACRES	TONS/AC	1,000 TONS	1,000 ACRES	TONS/AC	1,000 TONS	1,000 ACRES	TONS/AC
I	663.3	226.6	2.93	622.4	92.1	6.76	122.0	8.9	13.71	1407.7	327.6	4.30						
IIe	1295.2	552.3	2.35	3483.0	534.2	6.52	6824.5	520.1	13.12	11602.7	1606.6	7.22						
IIIs	178.0	74.0	2.41	89.0	12.2	7.30	26.0	1.8	14.44	293.0	88.0	3.33						
IIW	792.0	325.7	2.43	1034.7	171.8	6.02	357.7	36.6	9.77	2184.4	534.1	4.09						
IIIe	378.8	199.9	1.89	1171.6	177.7	6.59	6562.2	409.6	16.02	8112.6	787.2	10.31						
IIIs	350.4	169.0	2.07	540.4	74.4	7.26	224.2	16.3	13.75	1115.0	259.7	4.29						
IIIW	165.8	66.6	2.49	315.6	62.2	5.07	169.8	17.8	9.54	651.2	146.6	4.44						
IVe	88.3	69.4	1.27	208.8	38.8	5.38	2383.2	131.2	18.16	2680.3	239.4	11.20						
IVs	66.4	29.7	2.24	254.8	32.7	7.79	378.4	26.2	14.44	699.6	88.6	7.90						
IVW	356.6	139.9	2.55	349.5	65.7	5.32	93.5	10.9	8.58	799.6	216.5	3.69						
VW	73.1	37.9	1.93	43.5	7.1	6.13				116.6	45.0	2.59						
VIe	26.8	26.2	1.02	47.6	12.2	3.90	1231.7	48.1	25.61	1306.1	86.5	15.10						
VIIs	42.7	19.7	2.17	67.7	9.3	7.28	130.1	6.1	21.33	240.5	35.1	6.85						
VIIe	29.3	11.4	2.57	13.1	2.3	5.70	678.6	19.3	35.16	721.0	33.0	21.85						
VIIIs	5.1	3.2	1.59	26.0	5.0	5.20	221.8	8.2	27.05	252.9	16.4	15.42						
STATE TOTAL	4511.8	1951.5	2.31	8267.7	1297.7	6.37	19403.7	1261.1	15.39	32183.2	4510.3	7.14						

SOURCE: 1982 NRI



Figure 5-2

**Cropland Acreage by Erosion Related to "T", by MLRA  
(Subclass "e" Lands Only)**

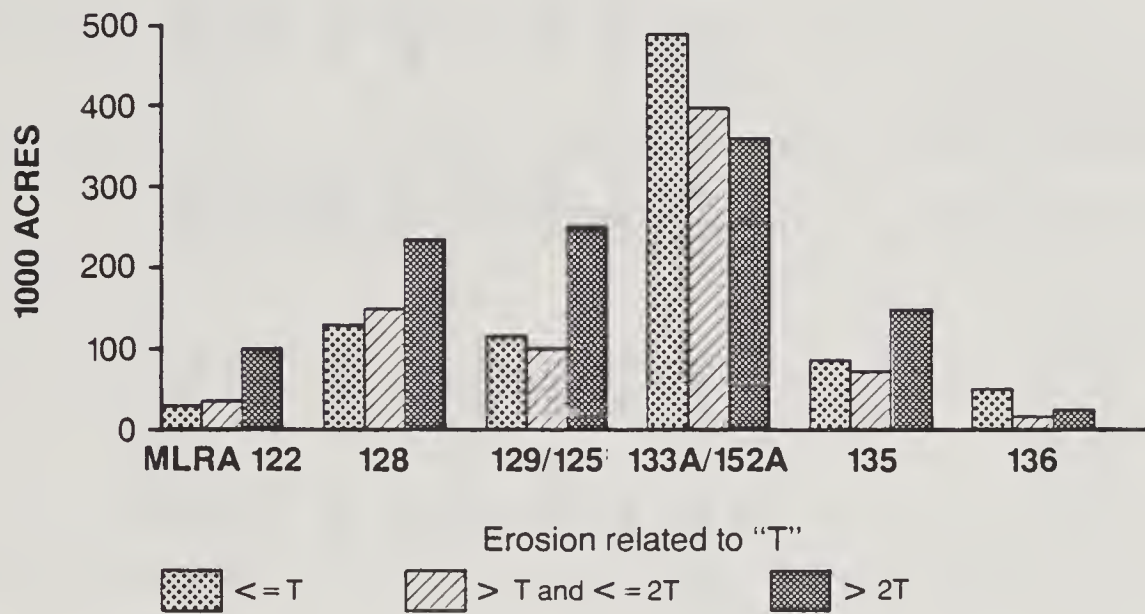
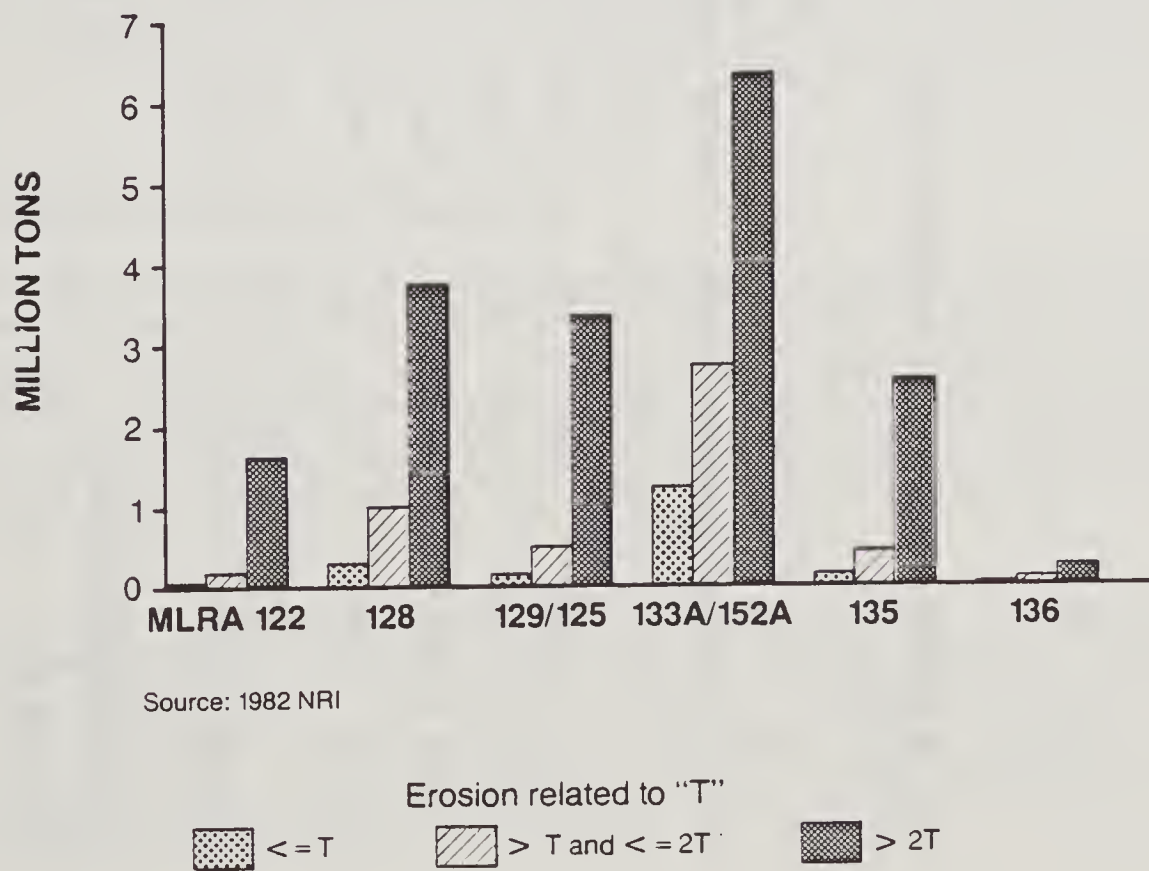


Figure 5-3

**Cropland Erosion Related to "T" Categories, by MLRA  
(Subclass "e" Lands Only)**



Source: 1982 NRI

Table 5-6

SHEET AND RILL EROSION ON ROW CROPS.  $\sqrt{\text{IN}}$  IN RELATION TO T VALUE  
BY MLRA, 1982

MLRA	<= T			>T AND <=2T			>2T			TOTAL		
	1,000 TONS	1,000 ACRES	TONS/AC	1,000 TONS	1,000 ACRES	TONS/AC	1,000 TONS	1,000 ACRES	TONS/AC	1,000 TONS	1,000 ACRES	TONS/AC
122	90.4	27.9	3.24	297.3	50.3	5.91	1631.0	107.8	15.13	2018.7	186.0	10.85
128	683.7	235.3	2.91	1518.3	230.5	6.59	3902.0	253.6	15.39	6104.0	719.4	8.48
129/125	121.8	61.0	2.00	455.6	95.3	4.78	3207.1	243.1	13.19	3784.5	399.4	9.48
133A/152A	2391.5	782.7	3.06	4582.6	685.7	6.68	6485.0	390.4	16.61	13459.1	1858.8	7.24
135	400.7	126.7	3.16	734.5	119.3	6.16	2389.0	149.3	16.00	3524.2	395.3	8.92
136	60.3	20.0	3.02	96.6	16.1	6.00	206.8	13.8	14.99	363.7	49.9	7.29
STATE TOTAL	3748.4	1253.6	2.99	7684.9	1197.2	6.42	17820.9	1158.0	15.39	29254.2	3608.8	8.11

$\sqrt{\text{IN}}$  INCLUDES DOUBLE CROPPED LAND

SOURCE: 1982 NRI

Table 5-7

Percentage of Row Cropland  
Within MLRA's by Relation to "T" Value, 1982

MLRA	= T	T and	= 2T	2T	Average Sheet & Rill Erosion 1/
	-----Percent of Total-----				Tons/Acre/Year
122	15	27		58	10.85
128	33	32		35	8.48
129/125	15	24		61	9.48
133A/152A	42	37		21	7.24
135	32	30		38	8.92
136	40	32		28	7.29
State Average	35	33		32	8.11

1/ Includes double crops

Source: 1982 NRI

Very serious erosion occurs on lands poorly suited for tillage. Classes IVe, VIe and VIIe, have a large percentage of row cropland eroding at greater than twice "T" (Table 5-8). As the result of tillage practices that are unsound and the lack of adequate conservation treatment, serious erosion is occurring even on lands that are well suited for tillage, such as classes I, IIe, and IIIe.

#### Pasture Land Erosion/Relation to "T"

Pasture grasses generally provide excellent erosion control, but there are areas with excessive erosion (Tables 5-9 and 5-10). Newly established pastures, overgrazing, very steep slopes, poor fertility, or other improper management can cause pastures to erode at excessive rates. The economic situation in the cattle industry over the past eight years has caused farmers to reduce fertilization and to overgraze pastures. The resulting depletion of ground cover is causing increased erosion of pastureland.

In 1982, 4.5 percent of Alabama's pasturelands were eroding at excessive rates. Pastureland erosion averages less than 1 ton per acre per year, with a total volume of 2,700,000 tons statewide in 1982. Problems do exist in some locations because of steep slopes or poor management. Some 104,000 acres of pastureland are eroding at rates greater than "T", with an additional 68,000 eroding at more than twice "T".



Table 5-8

SHEET AND RILL EROSION ON ROW CROPS 1 IN RELATION TO T VALUE.  
BY LAND CAPABILITY CLASS AND SUBCLASS, 1982

CLASS/ SUBCLASS	<= T			>T AND <=2T			>2T			TOTAL		
	1,000 TONS	1,000 ACRES	TONS/AC	1,000 TONS	1,000 ACRES	TONS/AC	1,000 TONS	1,000 ACRES	TONS/AC	1,000 TONS	1,000 ACRES	TONS/AC
I	609.8	197.5	3.09	604.6	89.3	6.77	101.3	7.4	13.69	1315.7	294.2	4.47
I1e	1096.3	345.2	3.18	3326.7	508.2	6.55	6466.3	489.7	13.20	10889.3	1343.1	8.11
I1s	140.1	48.5	2.89	80.8	11.3	7.15	26.0	1.8	14.44	246.9	61.6	4.01
I1w	744.1	261.8	2.84	1015.1	168.0	6.04	338.4	33.9	9.98	2097.6	463.7	4.52
I11e	254.7	85.4	2.98	1050.8	155.0	6.78	6259.0	383.8	16.31	7564.5	624.2	12.12
I11s	270.2	93.4	2.89	492.6	66.7	7.39	179.9	12.2	14.75	942.7	172.3	5.47
I11w	153.0	55.7	2.75	304.3	60.3	5.05	169.8	17.8	9.54	627.1	133.8	4.69
IVe	16.8	7.6	2.21	159.2	27.7	5.75	2233.6	119.1	18.75	2409.6	154.4	15.61
IVs	47.2	17.8	2.65	174.3	23.6	7.39	262.7	20.1	13.07	484.2	61.5	7.87
IVw	324.7	113.9	2.85	349.5	65.7	5.32	93.5	10.9	8.58	767.7	190.5	4.03
Vw	63.5	19.4	3.27	27.5	4.7	5.85				91.0	24.1	3.78
V1e				34.6	6.7	5.16	804.6	37.3	21.57	839.2	44.0	19.07
V1s	25.8	6.9	3.74	43.5	6.3	6.90	111.6	5.1	21.88	180.9	18.3	9.89
V11e							577.9	13.2	43.78	577.9	13.2	43.78
V11s	2.2	0.5	4.40	21.4	3.7	5.78	196.3	5.7	34.44	219.9	9.9	22.21
STATE TOTAL	3748.4	1253.6	2.99	7684.9	1197.2	6.42	17820.9	1158.0	15.39	29254.2	3608.8	8.11

1 INCLUDES DOUBLE CROPPED LAND

SOURCE: 1982 NRI

Table 5-9

SHEET AND RILL EROSION ON PASTURELAND IN RELATION TO T VALUE  
BY MLRA. 1982

MLRA	<= T			>T AND <=2T			>2T			TOTAL		
	1,000 TONS	1,000 ACRES	TONS/AC	1,000 TONS	1,000 ACRES	TONS/AC	1,000 TONS	1,000 ACRES	TONS/AC	1,000 TONS	1,000 ACRES	TONS/AC
122	63.8	99.4	0.64							63.8	99.4	0.64
128	214.2	530.7	0.40	3.2	1.3	2.46	43.5	4.1	10.61	260.9	536.1	0.49
129/125	261.3	592.8	0.44	60.3	17.7	3.41	103.7	13.8	7.51	425.3	624.3	0.68
133A/152A	671.3	1572.9	0.43	192.7	38.9	4.95	192.6	14.4	13.38	1056.6	1626.2	0.65
135	320.8	578.5	0.55	177.8	44.8	3.97	226.8	32.8	6.91	725.4	656.1	1.11
136	133.1	270.9	0.49							133.1	270.9	0.49
STATE TOTAL	1664.7	3645.2	0.46	436.6	103.8	4.21	589.1	67.6	8.71	2690.4	3816.6	0.70

SOURCE: 1982 NRI

Table 5-10

SHEET AND RILL EROSION ON PASTURELAND IN RELATION TO T VALUE  
BY LAND CAPABILITY CLASS AND SUBCLASS. 1982

CLASS/ SUBCLASS	<= T			>T AND <=2T			>2T			TOTAL		
	1,000 TONS	1,000 ACRES	TONS/AC	1,000 TONS	1,000 ACRES	TONS/AC	1,000 TONS	1,000 ACRES	TONS/AC	1,000 TONS	1,000 ACRES	TONS/AC
I	9.2	53.4	0.17							9.2	53.4	0.17
IIe	264.0	813.2	0.32	3.2	1.3	2.46				267.2	814.5	0.33
IIIs	10.7	25.5	0.42							10.7	25.5	0.42
IIW	76.2	394.7	0.19							76.2	394.7	0.19
IIIe	400.0	791.8	0.51	42.3	10.6	3.99				442.3	802.4	0.55
IIIs	25.7	102.6	0.25							25.7	102.6	0.25
IIIW	18.3	99.8	0.18							18.3	99.8	0.18
IVe	339.2	463.8	0.73	181.7	44.7	4.06	48.9	4.3	11.37	569.8	512.8	1.11
IVS	45.9	85.3	0.54							45.9	85.3	0.54
IVW	46.6	220.7	0.21							46.6	220.7	0.21
VW	26.3	119.4	0.22							26.3	119.4	0.22
VIe	196.4	223.2	0.88	125.8	26.5	4.75	311.7	41.3	7.55	633.9	291.0	2.18
VIS	24.9	46.9	0.53							24.9	46.9	0.53
VIIe	95.2	117.1	0.81	73.9	17.1	4.32	173.1	16.8	10.30	342.2	151.0	2.27
VIIIs	85.8	84.8	1.01	9.7	3.6	2.69	55.4	5.2	10.65	150.9	93.6	1.61
VIIW	0.3	3.0	0.10							0.3	3.0	0.10
STATE TOTAL	1664.7	3645.2	0.46	436.6	103.8	4.21	589.1	67.6	8.71	2690.4	3816.6	0.70

SOURCE: 1982 NRI



### Erosion on Disturbed Forest Land

Forest land disturbed in the past three to five years makes up only 12 percent of the total forest land, but contributes more than 54 percent of the total forest land erosion. The NRI classified forests as "disturbed" if the forest floor was disrupted enough to produce significant erosion. Disturbed forests are in two major types of disturbances, untilled and tilled (Table 5-11). Untilled disturbances include logging, burning (wildfire), grazing (enough to trample the ground cover), and four categories of site preparation performed after harvest. Tilled disturbances are bedding, disking, and root raking.

The effects of disturbance are profound and long lasting on steeply sloping land. However, most erosion occurs the first two years after the disturbance until native vegetation forms a good cover.

### Forest Land Erosion/Relation to "T"

Over 97 percent of Alabama's forests are eroding at rates less than or equal to "T" (Tables 5-12 and 5-13). However, erosion can be a serious problem on forest land that has been disturbed.

In Alabama, only about five percent of the forest acres are being grazed, but six percent of the grazed forest acres are eroding in excess of "T". Only two percent of the ungrazed forest acres are eroding in excess of "T".

TABLE 5-11

Forest Land, Sheet and Rill Erosion by Disturbance Classes, 1982

Disturbance Class	1,000 Tons	1,000 Acres	Tons/Acre
Untilled Disturbances	5,804.1	2,388.4	2.43
Tilled Disturbances	691.0	65.7	10.52
Undisturbed	5,515.2	18,179.2	0.30
State Total	12,010.3	20,633.3	0.58

### Erosion on Land in Minor Uses

Land in minor uses includes farmsteads, other land in farms, mines, quarries and pits, and other rural lands. The category includes only 556,500 acres in the state, but represents a large portion of the most severe erosion (Tables 5-14, 5-15, 5-16, and 5-17). There are about 107,000 acres in three MLRA's (128, 129, and 133A) that are eroding at so-called critical rates. Overall, 61 percent of these lands are eroding excessively.

Critical erosion is occurring on 87,000 acres of inactive and abandoned mines. Over 90 percent of all mined land is located in the Sand Mountain, Appalachian Ridges and Valleys, and the Coastal Plain MLRA's. Total erosion from mined land is estimated to be 41,500,000 tons per year.

Table 5-12

ANNUAL SHEET AND RILL EROSION ON FOREST LAND IN RELATION TO T VALUE  
BY MLRA, 1982

MLRA	<= T			>T AND <=2T			>2T			TOTAL		
	1,000 TONS	1,000 ACRES	TONS/AC	1,000 TONS	1,000 ACRES	TONS/AC	1,000 TONS	1,000 ACRES	TONS/AC	1,000 TONS	1,000 ACRES	TONS/AC
122	22.3	130.9	0.17	6.5	1.1	5.91	2.7	1.2	2.25	31.5	133.2	0.24
128	427.7	1932.8	0.22	50.7	24.8	2.04	33.6	5.2	6.46	512.0	1962.8	0.26
129/125	825.0	2798.3	0.29	110.1	46.9	2.35	1482.5	58.5	25.34	2417.6	2903.7	0.83
133A/152A	2818.6	12213.4	0.23	570.9	109.1	5.23	3816.0	169.0	22.58	7205.5	12491.5	0.58
135	217.7	848.2	0.26	21.5	2.8	7.68	487.0	21.2	22.97	726.2	872.2	0.83
136	488.1	2205.5	0.22	89.6	27.8	3.22	539.8	36.6	14.75	1117.5	2269.9	0.49
STATE TOTAL	4799.4	20129.1	0.24	849.3	212.5	4.00	6361.6	291.7	21.81	12010.3	20633.3	0.58

SOURCE: 1982 NRI

Table 5-13

SHEET AND RILL EROSION ON FOREST LAND IN RELATION TO T VALUE  
BY LAND CAPABILITY CLASS AND SUBCLASS. 1982

CLASS/ SUBCLASS	<= T			>T AND <=2T			>2T			TOTAL	
	1,000 TONS	1,000 ACRES	TONS/AC	1,000 TONS	1,000 ACRES	TONS/AC	1,000 TONS	1,000 ACRES	TONS/AC	1,000 TONS	1,000 ACRES
I	18.7	153.9	0.08							18.7	153.9
I1e	161.6	1277.1	0.13	16.7	2.2	7.59	38.0	2.5	15.20	216.3	1281.8
I1s	5.4	88.7	0.06							5.4	88.7
I1w	55.5	966.1	0.06							55.5	966.1
I11e	252.5	1837.6	0.14	17.8	6.1	2.92	40.1	4.3	9.33	310.4	1848.0
I11s	63.6	483.5	0.13	3.7	0.5	7.40				67.3	484.0
I11w	21.2	374.6	0.06							21.2	374.6
I1ve	511.9	2196.6	0.23	90.1	17.9	5.03	453.8	26.1	17.39	1055.8	2240.6
I1vs	118.3	533.1	0.22	95.0	15.8	6.01				213.3	548.9
I1vw	101.8	985.2	0.10							101.8	985.2
I1w	80.2	1777.7	0.05							80.2	1777.7
I11e	601.6	1953.9	0.31	84.5	18.6	4.54	881.7	51.8	17.02	1567.8	2024.3
I1s	154.2	557.2	0.28	76.7	10.6	7.24	222.3	9.7	22.92	453.2	577.5
I1w	2.7	73.8	0.04							2.7	73.8
I11e	1925.7	4651.2	0.41	308.5	92.5	3.34	3741.2	150.5	24.86	5975.4	4894.2
I11s	713.7	2060.7	0.35	156.3	48.3	3.24	984.5	46.8	21.04	1854.5	2155.8
I11w	3.8	144.7	0.03							3.8	144.7
I111s	7.0	13.5	0.52							7.0	13.5
STATE TOTAL	4799.4	20129.1	0.24	849.3	212.5	4.00	6361.6	291.7	21.81	12010.3	20633.3

SOURCE: 1982 NR1



Table 5-14

SHEET AND RILL EROSION ON MINOR USES (EXCEPT SMALL BUILT-UP) BY MLRA, 1982

MLRA	FARMSTEADS AND RANCH HEADQUARTERS			OTHER LAND IN FARMS			MINES, QUARRIES, AND PITS			OTHER RURAL LANDS			TOTAL		
	1,000 TONS	1,000 ACRES	TONS/AC	1,000 TONS	1,000 ACRES	TONS/AC	1,000 TONS	1,000 ACRES	TONS/AC	1,000 TONS	1,000 ACRES	TONS/AC	1,000 TONS	1,000 ACRES	TONS/AC
122	18.5	5.9	3.1										18.5	5.9	3.1
125	0.8	1.8	0.4										0.8	1.8	0.4
128	81.5	35.3	2.3	91.1	14.7	6.2	1272.4	23.5	54.1	28.8	8.7	3.3	1473.8	82.2	17.9
129	1167.0	59.7	19.5	19.8	11.0	1.8	35470.1	73.6	481.9	164.3	3.8	43.2	36821.2	148.1	248.6
133A	471.6	75.8	6.2	32.1	47.3	0.7	4707.8	45.7	103.0	278.9	81.9	3.4	5490.4	250.7	21.9
135	116.2	6.6	17.6							3.5	11.6	0.3	119.7	18.2	6.6
136	4.6	10.3	0.4	3.5	4.8	0.7	48.1	2.2	21.9	1.1	5.0	0.2	57.3	22.3	2.6
152A	0.5	1.4	0.4							14.1	25.9	0.5	14.6	27.3	0.5
STATE TOTAL	1860.7	196.8	9.5	146.5	77.8	1.9	41498.4	145.0	286.2	490.7	136.9	3.6	43996.3	556.5	79.1

SOURCE: 1982 NR1

Table 5-15

SHEET AND RILL EROSION IN RELATION TO T VALUE ON MINOR USES  
(EXCEPT SMALL BUILT-UP), BY MLRA, 1982

	<=T			>T AND <=2T			>2T			TOTAL		
	1,000 TONS	1,000 ACRES	TONS/AC	1,000 TONS	1,000 ACRES	TONS/AC	1,000 TONS	1,000 ACRES	TONS/AC	1,000 TONS	1,000 ACRES	TONS/AC
122	3.7	4.9	0.8				14.8	1.0	14.8	18.5	5.9	3.1
125	0.8	1.8	0.4							0.8	1.8	0.4
128	33.9	52.0	0.7	16.2	1.8	9.0	1423.7	28.4	50.1	1473.8	82.2	17.9
129	73.1	72.7	1.0	41.8	8.3	5.0	36706.3	67.1	547.0	36821.2	148.1	248.6
133A	89.0	187.6	0.5	138.1	20.7	6.7	5263.6	42.4	124.1	5490.7	250.7	21.9
135	6.3	16.1	0.4	1.9	1.7	1.1	111.5	0.4	278.8	119.7	18.2	6.6
136	10.8	21.2	0.5				46.5	1.1	42.3	57.3	22.3	2.6
152A	14.6	27.3	0.5							14.6	27.3	0.5
STATE TOTAL	232.2	383.6	0.6	198.0	32.5	6.1	43566.4	140.4	310.3	43996.6	556.5	79.1

SOURCE: 1982 NR1

Table 5-16

SHEET AND RILL EROSION IN RELATION TO T VALUES ON MINOR USES, 1982

	<= T		>T AND <=2T		>2T		TOTAL	
	1,000 TONS	1,000 ACRES	TONS/AC	1,000 TONS	1,000 ACRES	TONS/AC	1,000 TONS	1,000 ACRES
FARMSTEADS	87.5	172.4	0.5	16.0	4.1	3.9	1757.2	20.3
							1860.7	196.8
OTHER LAND IN FARMS	28.8	70.8	0.4	14.8	2.5	5.9	102.9	4.5
							146.5	77.8
MINES, QUARRIES, AND PITS	49.9	27.2	1.8	64.7	11.2	5.8	41384.1	106.6
							41498.7	145.0
OTHER RURAL LAND	66.0	113.2	0.6	102.5	14.7	7.0	322.2	9.0
							490.7	136.9
STATE TOTAL	232.2	383.6	0.6	198.0	32.5	6.1	43566.4	140.4
							43996.6	556.5

SOURCE: 1982 NRI

Table 5-17

SHEET AND RILL EROSION IN RELATION TO T VALUE ON MINES, QUARRIES, AND PITS BY MLRA, 1982

MLRA	<= T		>T AND <=2T		>2T		TOTAL	
	1,000 TONS	1,000 ACRES	TONS/AC	1,000 TONS	1,000 ACRES	TONS/AC	1,000 TONS	1,000 ACRES
128	1.8	2.4	0.8				1209.4	23.5
							1207.6	21.1
129	34.7	12.1	2.9	39.2	7.4	5.3	35422.2	54.1
							654.8	73.6
133	11.8	11.6	1.0	25.5	3.8	6.7	4707.8	30.3
							155.4	45.7
136	1.6	1.1	1.5				46.5	1.1
							42.3	2.2
STATE TOTAL	49.9	27.2	1.8	64.7	11.2	5.8	41384.1	106.6
							41498.7	145.0

SOURCE: 1982 NRI

### Gullies and Other Channel Erosion

Channel-type erosion, if serious enough to be noticeable is usually "critical", and the term "channel erosion" is rarely used. As shown in Figure 5-4, the 1982 NRI in Alabama tabulated "critically eroding areas" in three general categories; (1) gullies; (2) stream banks and stream beds; and (3) eroding road surfaces and roadsides in five categories of roads (Table 5-18). Approximately 96,000 acres are producing 28 percent of the total erosion and sediment within the state, the most serious category of sediment sources that need treating. In most cases, it is not economically practical to completely rehabilitate critically eroded land because so much soil has been removed that the area cannot be shaped to its former contour.

Table 5-18  
Critically Eroding Acres by MLRA, 1982

MLRA	Gullies	Stream Banks and Stream Beds	Roads and Roadsides	Total
-----1,000 Acres-----				
122	1.22	0.29	0.19	1.70
128	15.19	0.59	1.88	17.66
129/125	9.61	0.56	3.41	13.58
133A/152A	18.11	4.11	20.49	42.71
135	14.11	2.33	0.66	17.10
136	1.41	0.03	2.22	3.66
State Total	59.65	7.91	28.85	96.41

Source: 1982 NRI

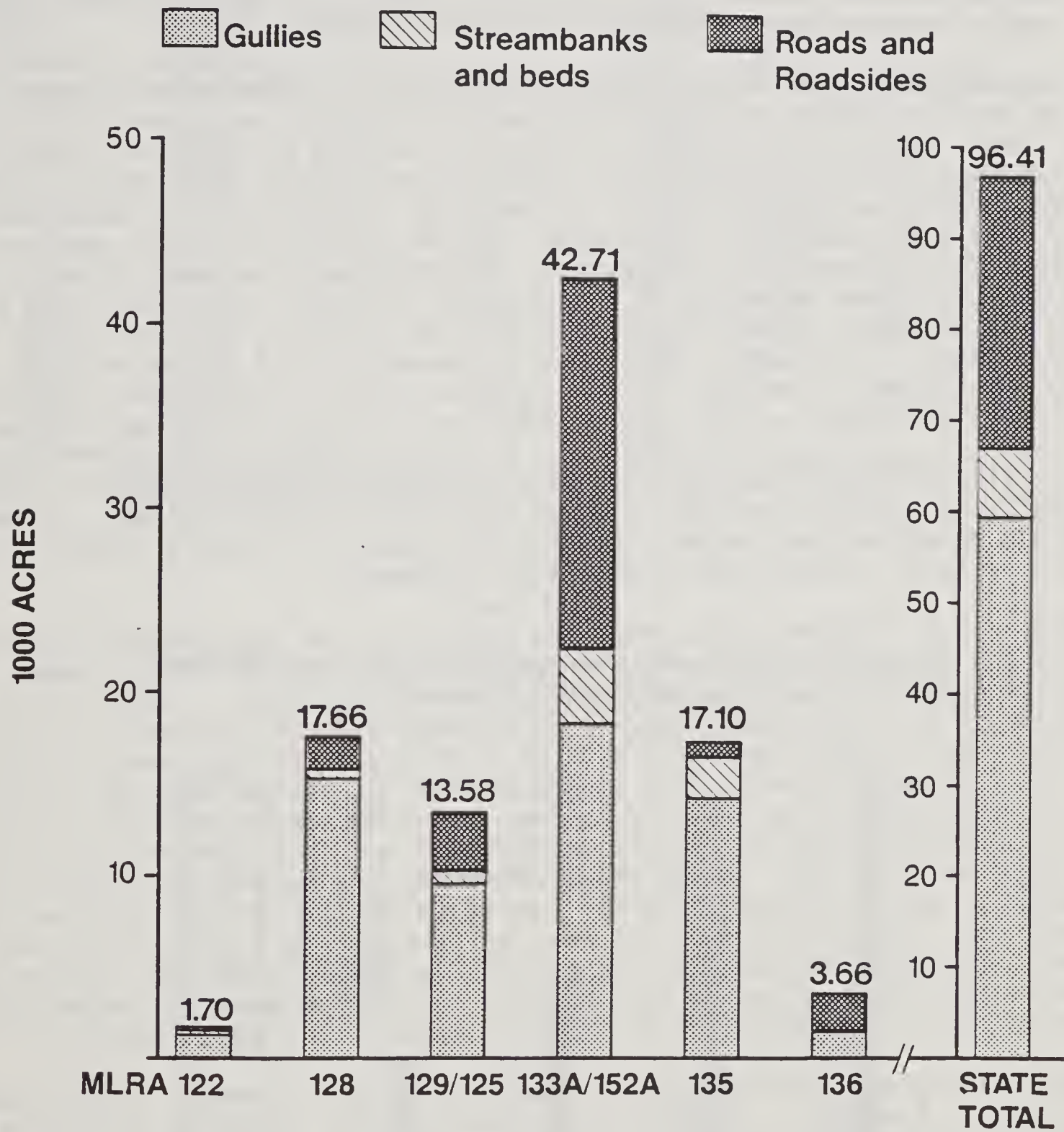
Gullies are the most serious "critically eroding areas", occurring on 60,000 acres. Most of the acreage, and the most severe gullies, are in the Coastal Plain. The Blackland Prairies and the Appalachian Ridges and Valleys have the heaviest concentration of gullies. Total critical erosion from all sources in Alabama is 25,154,000 tons per year.

The Coastal Plain-Gulf Coast Flatwoods (MLRA's 133A/152A) has about 20,000 acres of critically eroding roadsides. This is caused in part by the geologic nature of the area. Deep road-cuts with high banks in the Coastal Plains are in easily eroded unconsolidated materials, whereas deep road-cuts in the rest of the state are generally in rocky material.



Figure 5-4

# Acreage of Critically Eroding Areas, by MLRA, 1982



Source: 1982 NRI

## EROSION AND SOIL PRODUCTIVITY

### Erosion's Effect on Productivity

Sheet and rill erosion left untreated can become a serious problem on all MLRA's in Alabama as shown in Table 5-19. When row crops are grown continuously with no conservation treatment, erosion rates can be expected to exceed "T", even on class I soils. When class IIe to IVe soils are cultivated under these conditions, the long-term effect on yields is devastating.

Numerous sources of information were considered in developing a formula used to evaluate the effect of excess sheet and rill erosion on future yields with and without conservation treatment. Auburn University personnel utilized on-going erosion/productivity research to assist in developing the formula. Factors in the formula included base year erosion rates compared to "T", base year yields, and the time span to a future date. Current technology was assumed to isolate the effect of erosion in the future. Ultimately, values were developed for the yield reductions expressed as a percentage for each inch of soil lost over a period of time. Topsoil depth is a critical factor in determining the effect of erosion. In Alabama, topsoil depth averages 7 to 8 inches on level, slightly eroding soils, but only 5 to 6 inches on slight to moderately eroding land. Topsoil depth may vary greatly by MLRA and land capability class/subclass.

The effect of gully erosion on yields was estimated to account for reduced yields on sloping cropland fields without water disposal systems. Values for yield reductions were established based on the SCS inventory of gully erosion on cropland in Alabama and professional judgement.

Figure 5-5 illustrates the projected decline in row crop productivity on MLRA's 122 and 128, the Highland Rim and Appalachian Ridges and Valleys, when soils are cropped continuously with no conservation treatment. Class I soils can be farmed with minimal short-term (1982 to 1990) effects, however, over the long run (1982 to 2030) row crop yields will decline 10 to 15 percent. Yields on Class IIe soils eroding at an annual rate of 15 tons per acre can be expected to drop 10 percent by 1990 and be down nearly 40 percent by 2030. Class IIIe soils exhibit a similar decline in the short run, but lose over half of their productivity by 2030. Class IVe soils illustrate the extreme case of land misuse. When row cropped without thorough attention to soil conservation practices, these soils lose all row crop productivity over the long run. In most instances, the conservation measures necessary to control erosion on IVe soils are too expensive to justify a row cropping enterprise, hence, these soils should be used primarily for hay, pasture, or forest production.

The relationship between erosion rates and yields is further illustrated in Figures 5-6 and 5-7. Each point represents a major row crop grown in a MLRA. The plotted results reveal an almost straight line relationship between erosion and productivity in both the short and long run. In the short run, erosion rates below 10 tons per acre per year have minimal effects upon productivity (Figure 5-6). When the annual rate rises to 20 tons per acre, a crop yield loss of 10 to 15 percent by 1990 is observed. In the long run, these same erosion rates lower crop yields dramatically (Figure 5-7). A 10-ton per year erosion rate will reduce yields by 25 percent, while a loss of 20 tons annually will cut yields in half. Continuous erosion rates exceeding 30 tons per acre will essentially destroy the land for crop production by 2030.



Table 5-19

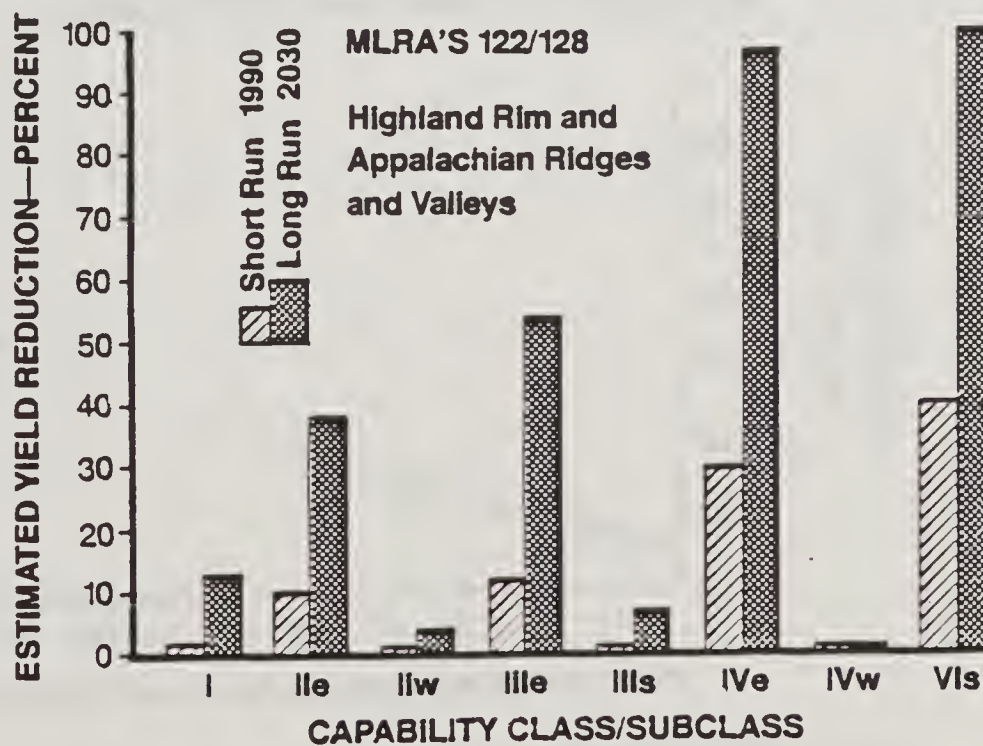
Estimated Average Erosion Rates for Cropland Continuously  
Row Cropped With No Conservation Treatment  
by MLRA and Land Capability Class, 1982

Class/ Subclass	Average For All MLRA'S	MLRA					
		122,128	129,125	133A (Lower)	133A (Upper)	135	136
-----Tons/Acre Per Year-----							
I	6.5	9.0	--	5.8	--	--	4.7
IIe	15.3	15.3	13.9	11.1	24.0	12.2	15.4
IIIs	6.4	--	--	6.4	--	--	--
IIw	7.4	6.5	--	7.2	7.0	7.2	9.2
IIIe	26.3	19.3	32.4	15.4	40.0	18.4	32.7
IIIs	8.9	6.2	--	11.6	--	--	--
IIIw	4.7	--	--	--	5.3	--	4.1
IVe	39.4	58.2	48.3	14.4	--	36.9	--
IVs	13.5	--	--	13.5	--	--	--
IVw	4.5	3.0	--	--	5.4	5.0	--
VIe	69.5	--	86.8	--	--	40.8	81.0
VIIs	75.7	119.4		32.0			

Source: USDA-SCS Estimates developed using selected soils data in the  
Universal Soil Loss Equation

Figure 5-5

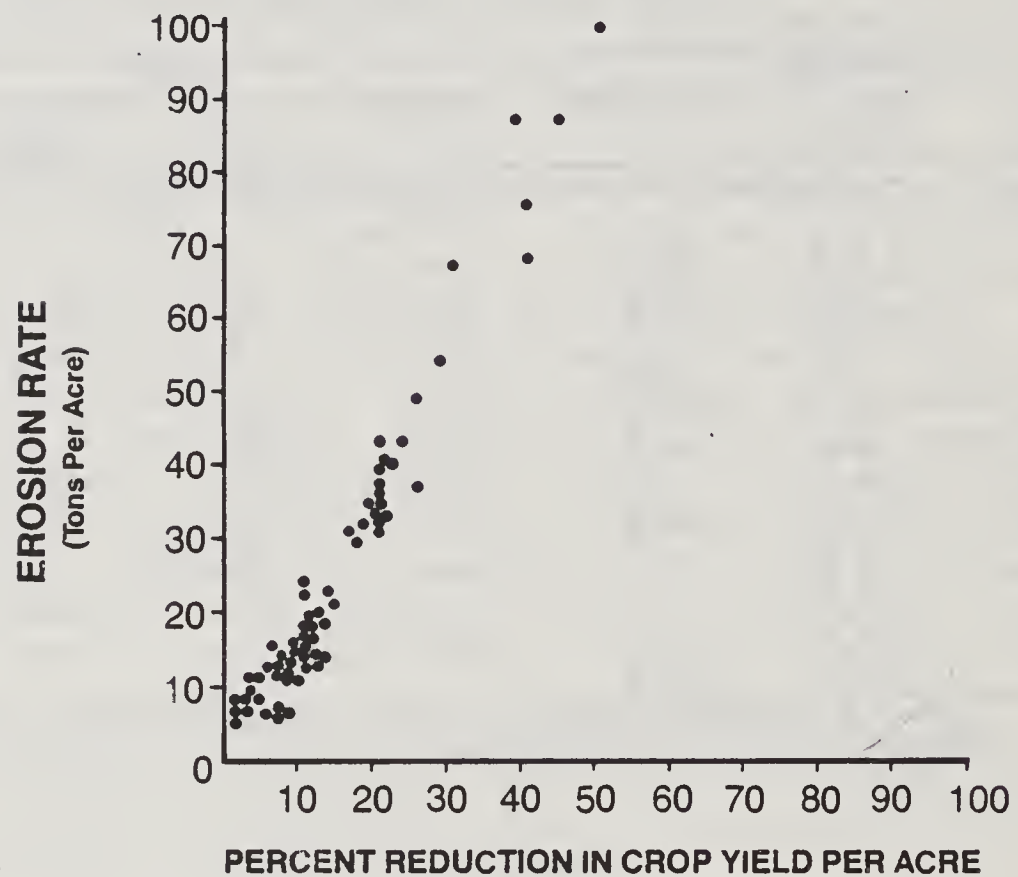
**Loss of Crop Productivity Because of Sheet and Rill Erosion  
by Capability Class/Subclass**



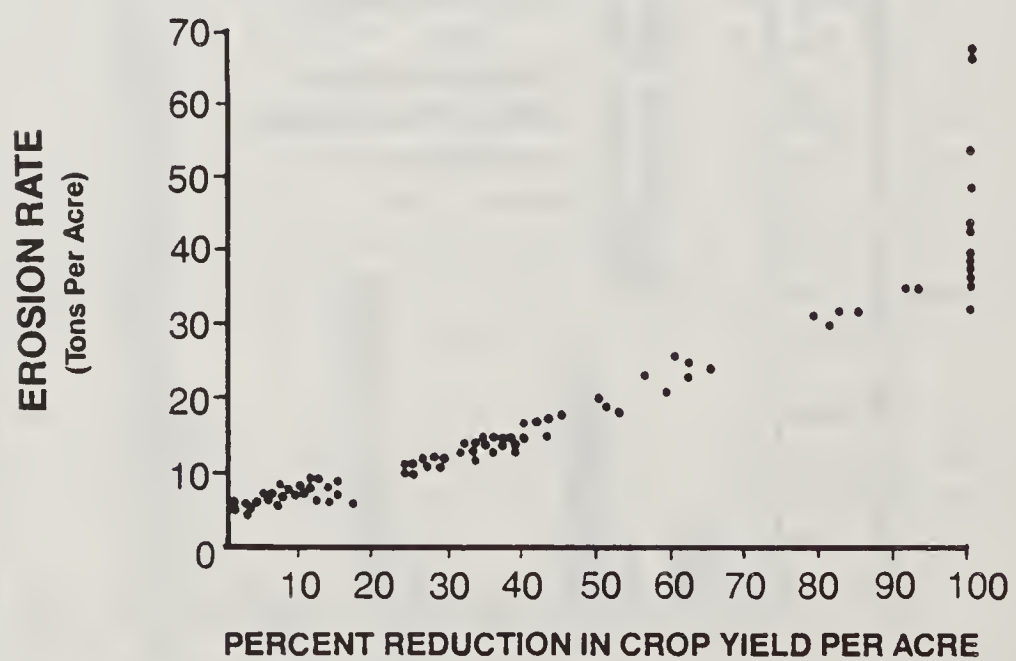
Source: USDA-SCS and Auburn University



**Figure 5-6**  
**Short Run (by 1990) Loss in Crop Productivity**  
**Because of Sheet and Rill Erosion**



**Figure 5-7**  
**Long Run (by 2030) Loss in Crop Productivity**  
**Because of Sheet and Rill Erosion**



Source: USDA-SCS and Auburn University

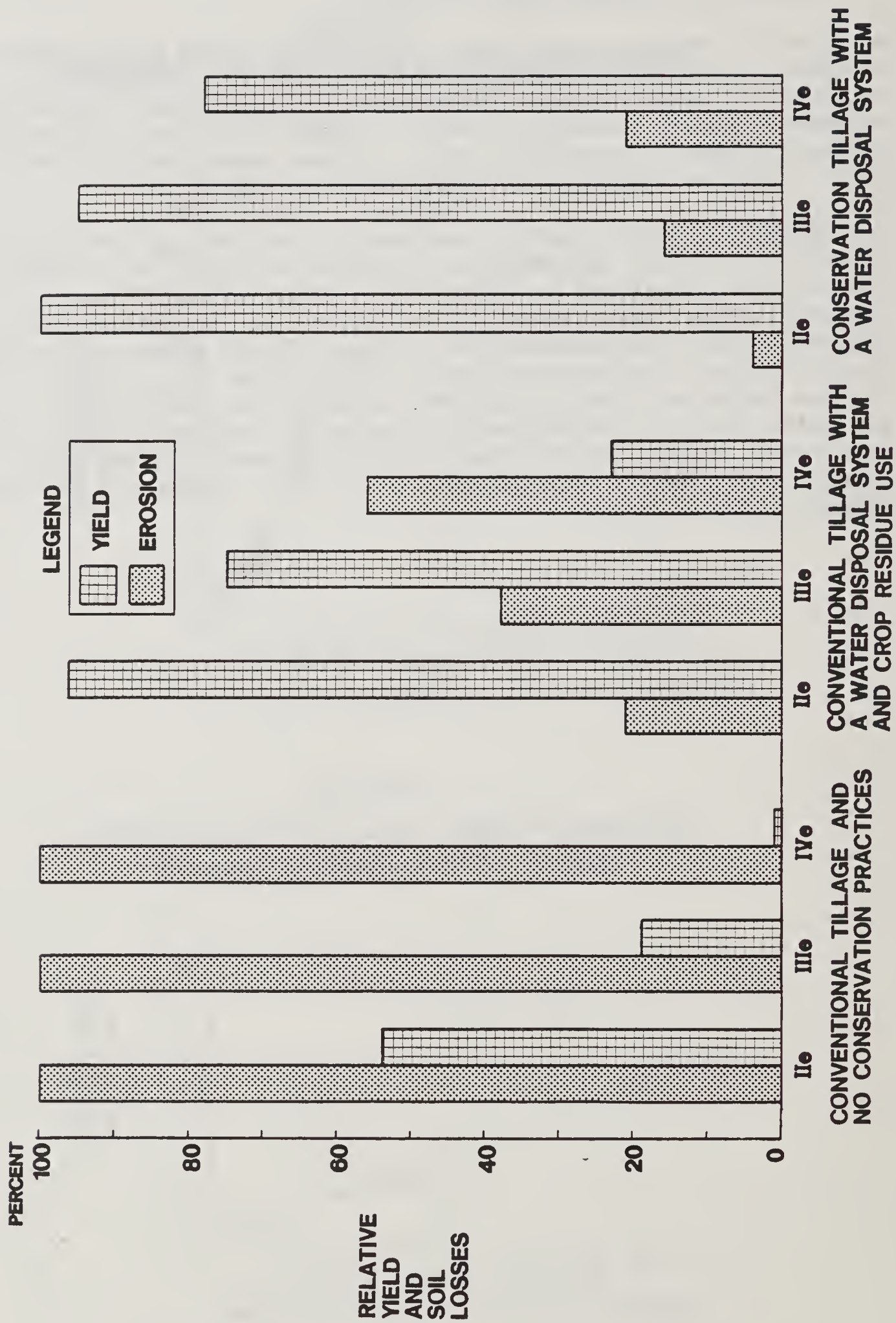
## Benefits of Conservation Treatment

What can be done to control soil loss and insure the protection of our soil resources? Most soils in land capability classes I through IIIe can be treated with a combination of conservation practices to reduce erosion to tolerable levels. However, stronger systems including crop/sod rotations are needed for some IIIe and IVe soils. In some cases, cropping on IIIe and IVe soils should be converted to grassland or forest.

The effect of erosion control treatment on erosion and corn yield by land capability class on Sand Mountain is shown in Figure 5-8. Three common conservation situations are examined -- conservation tillage with a water disposal system, conventional tillage with crop residue use and a water disposal system, and conventional tillage without conservation treatment. Erosion control and sustained crop yield are the benefits of the conservation tillage and water disposal systems. Less erosion control and a lower yield is projected with the conventional tillage with a water disposal system and crop residue use because erosion control is less than adequate. The no treatment situation provides no erosion control and yield is greatly decreased on the damaged soil.

Figure 5 - 8

Long Term Effect Of Erosion Control Treatment On Erosion And Corn Yield  
By Land Capability Class / Subclass On Sand Mountain Soils , MLRA 129



Source : SCS / USDA And Auburn University Agricultural Experiment Station Estimates



## CONSERVATION TREATMENT NEEDS

Almost 19 million acres of Alabama's nonfederal rural land needs some type of conservation treatment. This treatment may include erosion control, drainage, forage protection, forage improvement or reestablishment, timber establishment, or timber stand improvement. An additional 300,000 acres need some type of conservation treatment but are not feasible to treat. About 261,000 acres of the land in this category is forest land. Conservation treatment needs on Alabama's nonfederal rural land is displayed in Table 5-20.

TABLE 5-20  
Conservation Treatment Needs on Alabama's  
Nonfederal Rural Land, 1982

	-----Land Use-----				Total
	Crops	Pasture	Forest	Minor Uses 1/	Rural Land
	-----1,000 Acres-----				
Adequately Protected	1,523.3	1,883.6	6,694.2	309.1	10,410.2
Treatment Not Feasible	--	5.1	261.0	34.7	300.8
Treatment Needed: <sup>2/</sup>					
Erosion Control	2,828.8	122.1	225.3	212.7	3,388.9
Drainage	158.2	39.7	--	--	197.9
Forage Protection					
Improvement or					
Reestablishment	--	1,766.1	15.4	--	1,781.5
Timber Establishment,					
Reinforcement, and					
Stand/Crop Improvement	--	--	13,437.4	--	13,437.4
Total Treatment Needed	2,987.0	1,927.9	13,678.1	212.7	18,805.7
Total	4,510.3	3,816.6	20,633.3	556.5	29,516.7

1/ Does not include small built-up areas

2/ Excludes acres not feasible to treat

Source: 1982 NRI

## Erosion Control

Erosion control is the most serious conservation treatment need in Alabama. Deterioration of the resource base along with off-site damages such as flooding, sedimentation, and water pollution have a direct impact on the landowner and indirectly to the community and state. Erosion control treatment is needed on about 3.4 million acres of nonfederal rural land in Alabama.

### Erosion Control on Cropland

More than 80 percent of all the land in Alabama needing erosion control is in crops. On the basis of total need, cropland in the Coastal Plain - Gulf Coast Flatwoods, MLRA 133A/152A, has the greatest need for erosion control. A total of 1.3 million acres or 56 percent of its total cropland needs erosion control treatment. The Highland Rim, MLRA 122, and the Sand Mountain - Cumberland Plateaus, MLRA 129/125, in north Alabama have the highest percentage of their total cropland needing treatment. In these two MLRA's, 78 percent of their total cropland needs conservation treatment for erosion control. Conservation treatment needs on cropland within each MLRA compared with the amounts adequately protected is illustrated in Figure 5-9. Additional data in Appendix C shows conservation treatment needs on cropland for individual MLRA's by land capability classes.

Conservation treatment for cropland erosion includes a variety of alternatives. Conservation cropping systems, particularly those that include conservation tillage, may control erosion satisfactorily in some instances. However, on most sloping crop fields where both ephemeral gullying and sheet and rill erosion occur, complete water disposal systems are needed. Those systems include contour farming combined with gradient terraces or diversions, the use of underground outlets or vegetated waterways at the outlets of terraces or diversions, and grass borders along the edge of the field.

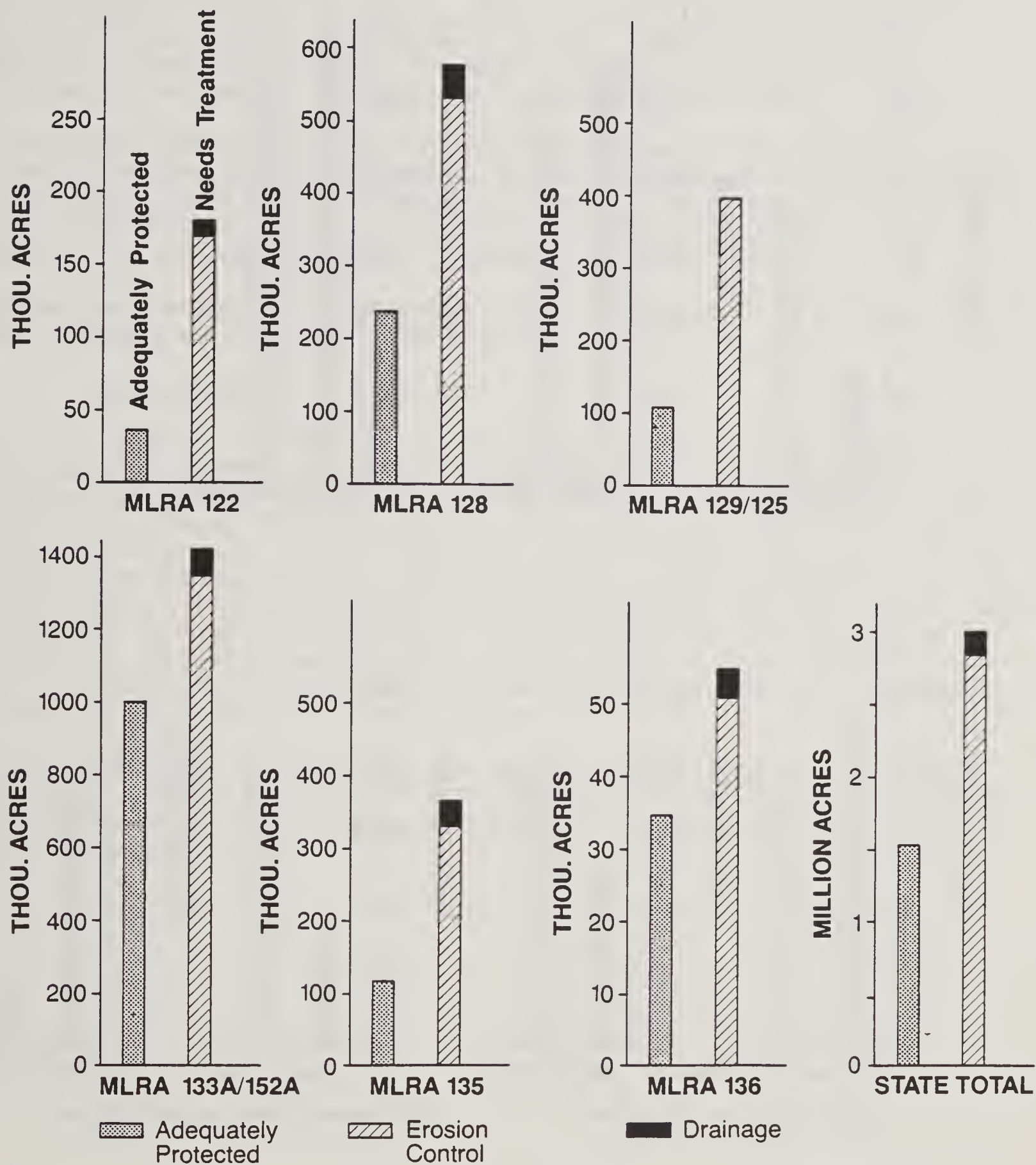
### Erosion Control on Pastureland

Overgrazing and depletion of the ground cover have intensified soil erosion on pastureland. About 170,000 acres of pastureland in Alabama are eroding at rates greater than the tolerable soil loss rate "T". Erosion control is a specific need on 122,000 acres (Table 5-20). One-half of the total needs for the state are in the Blackland Prairies, MLRA 135, where almost 10 percent of the pastureland needs conservation treatment for erosion control. Pastureland needing treatment for erosion control across the rest of the state is small, 3 percent or less of all the land in pasture in 1982. Amounts of conservation treatment needed on pastureland in Alabama within each MLRA, compared with that adequately protected, is shown in Figure 5-10.

Means of providing protection from excessive erosion on pastureland consists of grazing management, providing watering facilities to better distribute grazing, complete reestablishment, and treating critical areas with special erosion control procedures. Conservation treatment needs on pastureland by capability classes and by MLRA's are shown in Appendix C.

Figure 5 - 9

# Conservation Treatment Needs on Cropland, 1982, By MLRA

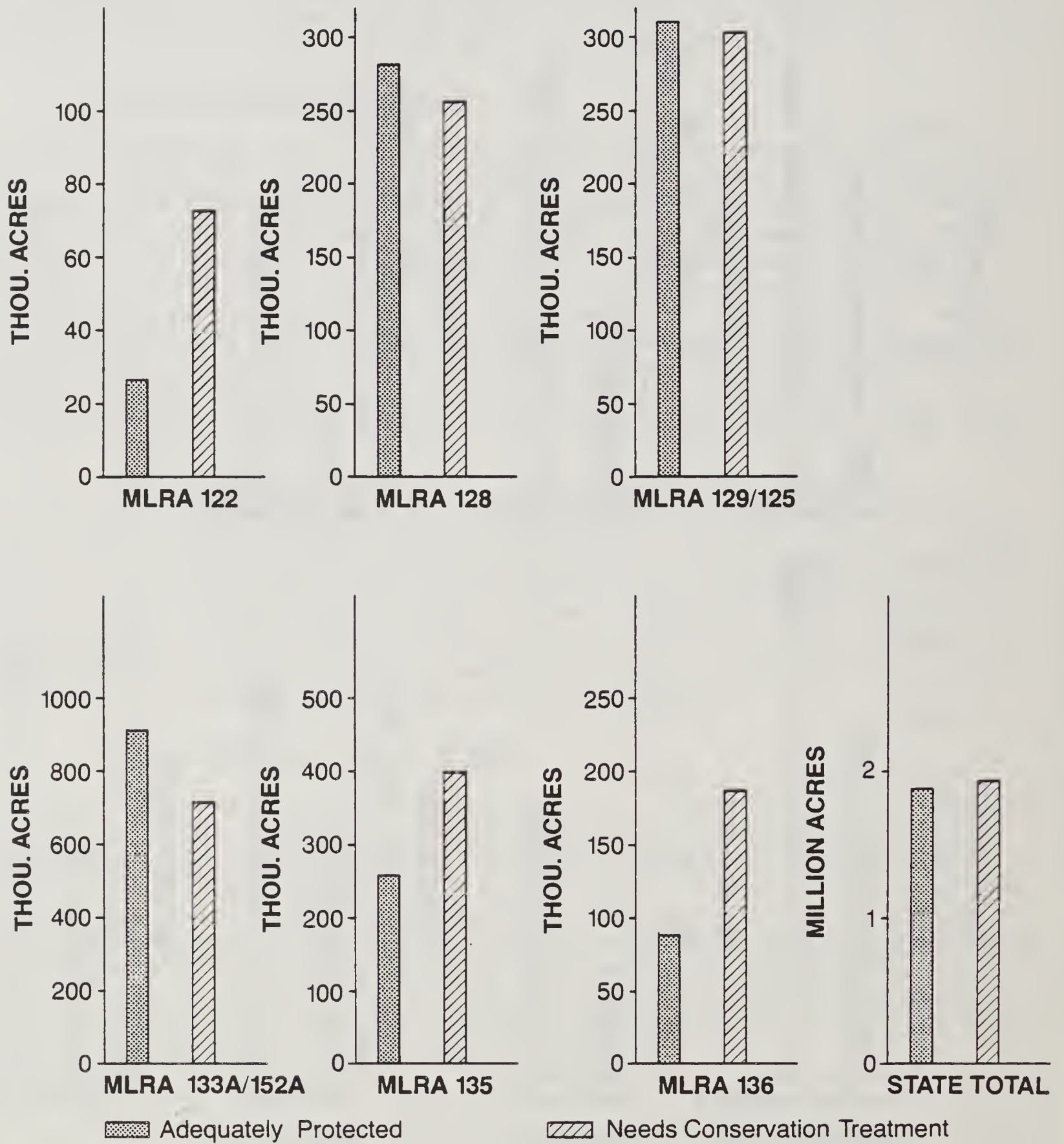


Source: 1982 NRI



Figure 5 - 10

# Conservation Treatment Needs on Pastureland, 1982, by MLRA



Source: 1982 NRI

### Erosion Control on Forest Land

Excessive erosion occurs on about 500,000 acres of forest land in Alabama. Discounting the impracticality of treating some areas, there remains a net amount of 225,000 acres where soil erosion is a significant problem (Table 5-20). More than one-half, 166,000 acres, of forest land with treatable erosion problems occur in the Coastal Plain-Gulf Coast Flatwoods, MLRA 133A/152A. Figure 5-11 compares the amount of forest land adequately protected to that needing treatment for each MLRA and the state.

The principal types of conservation treatment recommended for reducing erosion on forest land are grazing management, reestablishing trees or grass on burned areas, logging roads and skid trails, and avoiding the clogging of streams with residue from harvest. Gully erosion on forest land occurs mainly in the Coastal Plain and requires special treatment considerations.

Conservation treatment needs on forest land by land capability classes for each MLRA in Alabama are presented in Appendix C.

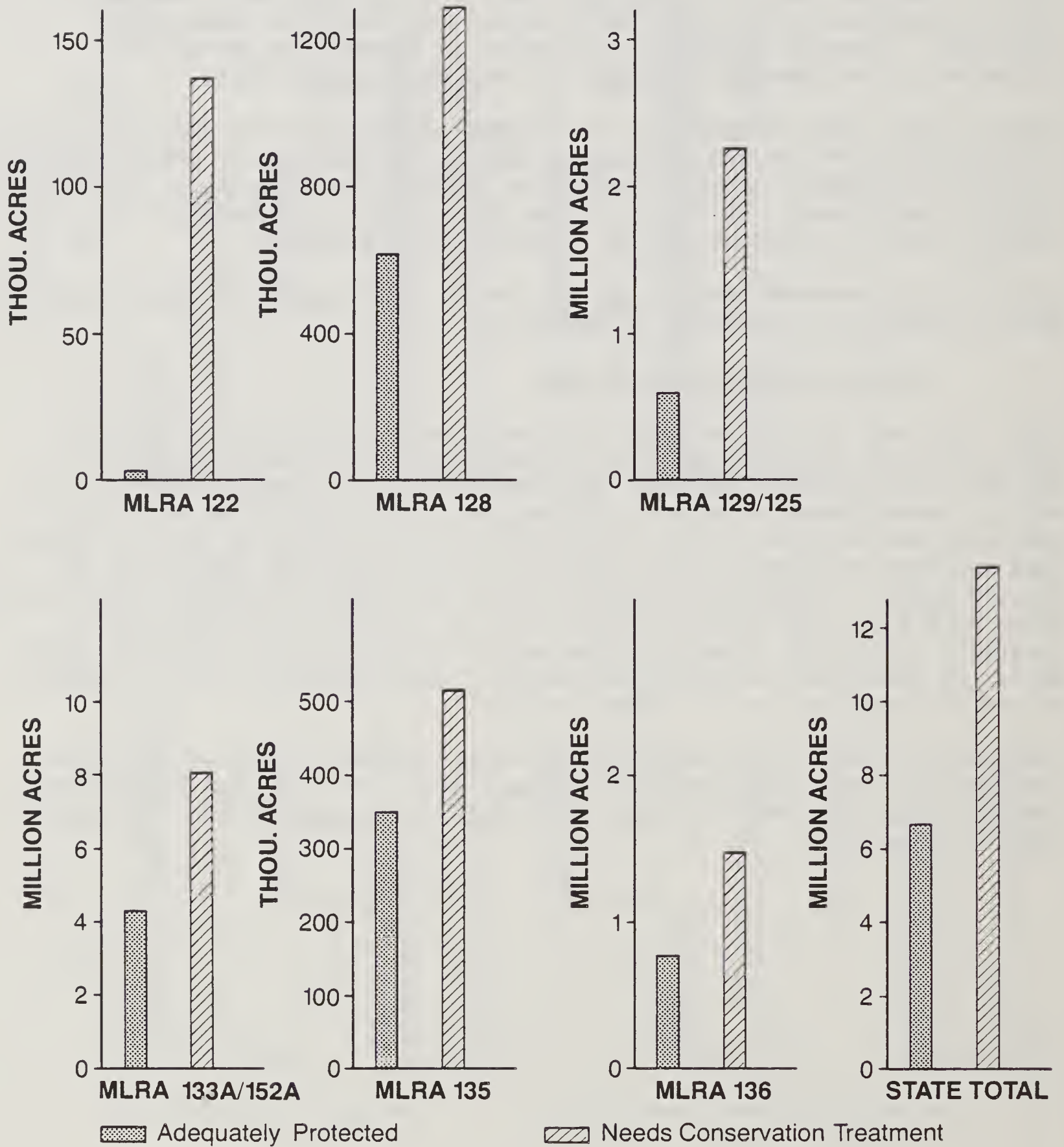
### Erosion Control on Minor Uses

Minor land uses include farm and ranch headquarters, other land in farms, mines, quarries and pits, and other nonbuilt-up rural lands. Slightly over 200,000 acres of minor land uses need treatment for erosion control with the majority being needed on mines, quarries and pits. Most of the minor land uses that need erosion control occur within the Appalachian Ridges and Valleys, Sand Mountain and Coastal Plain, MLRA's 128, 129, and 133A (200,000 of the 212,000 acres). Seventy-six percent of the land needing treatment within these three MLRA's is eroding at so called "critical rates" and if conservation treatment is applied, it must include extensive shaping and structural treatment. In some cases, so much soil has been removed that the area can only be shaped to a semblance of its former contour.

The amount of minor uses needing conservation treatment compared with that adequately protected is displayed in Figure 5-12, for each MLRA in Alabama. Treatment needs for minor uses by land capability classes within each MLRA are shown in Appendix C.

Figure 5-11

# Conservation Treatment Needs on Forest Land, 1982, by MLRA

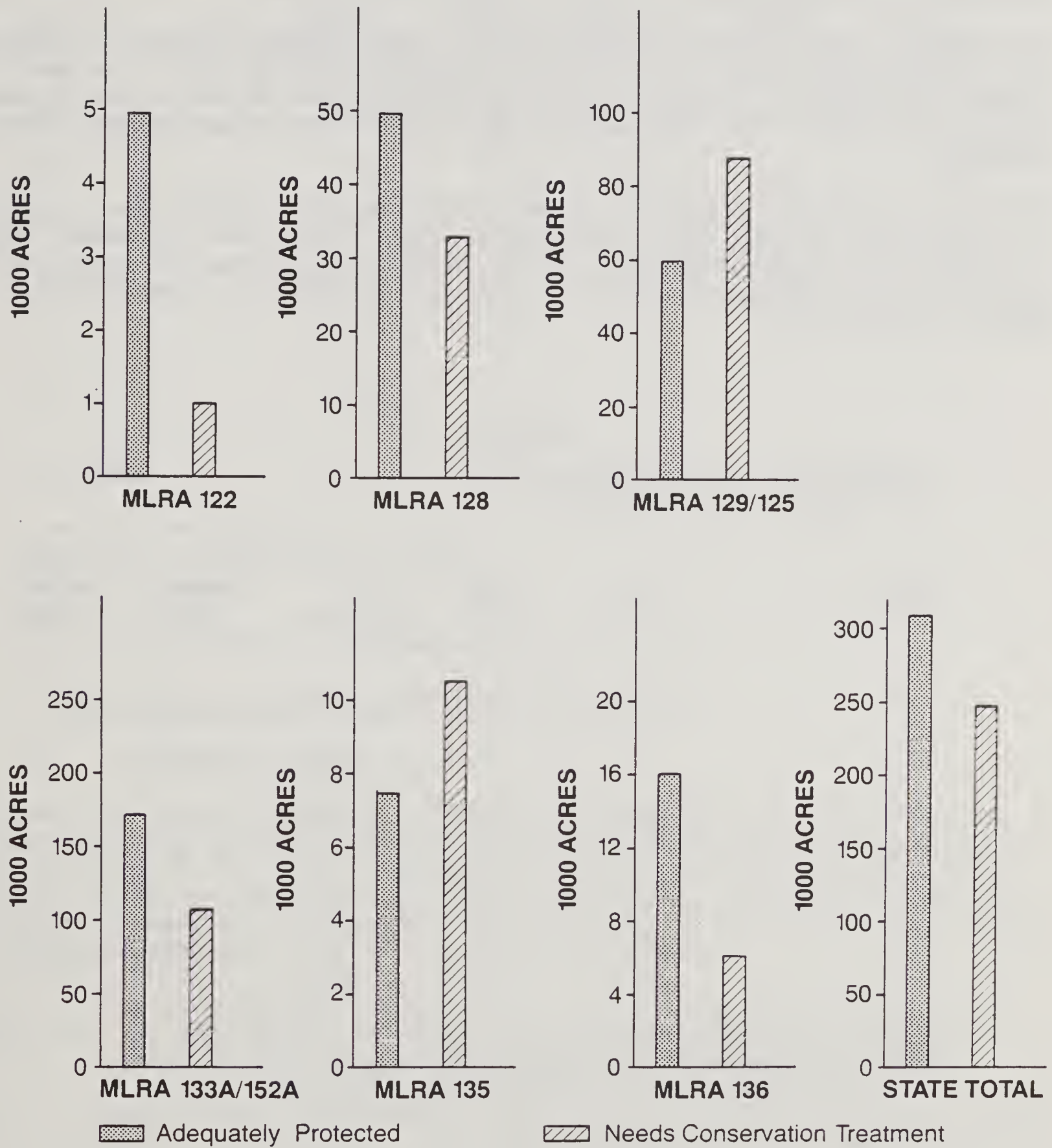


Source: 1982 NRI



Figure 5-12

# Conservation Treatment Needs on Minor Uses, 1982, By MLRA



Source: 1982 NRI

## Drainage Needs on Cropland and Pastureland

Another component of conservation treatment for crops and pastures in Alabama is the need for drainage to solve soil wetness problems. Cropland and pastureland with soil wetness problems occur throughout the state, but are more prevalent in the areas where intensive row-cropping occurs.

Thirty-nine percent of the 158,000 acres of crops needing drainage in Alabama are in the Coastal Plain - Gulf Coast Flatwoods, MLRA 133A/152A. The most concentrated drainage needs, compared to the total land in crops, are in the Blackland Prairies, MLRA 135, where 7 percent of its cropland suffers from soil wetness.

Alabama's pastureland needing drainage in 1982 was about 40,000 acres. Most of these acres (36,000) are in the Coastal Plain - Gulf Coast Flatwoods, MLRA 133A/152A, and in the Blackland Prairies, MLRA 135. Drainage needs on cropland and pastureland by land capability classes and by MLRA's are summarized in Tables 5-21 and 5-22.

Table 5-21

DRAINAGE NEEDS ON CROPLAND AND PASTURELAND, 1982,  
BY LAND CAPABILITY CLASS AND SUBCLASS

CLASS/ SUBCLASS	TOTAL CROPLAND	DRAINAGE NEEDED	TOTAL PASTURELAND	DRAINAGE NEEDED	TOTAL DRAINAGE NEEDS
-----1000 ACRES-----					
I	327.6	11.7 <sup>1/</sup>	53.4	0.0	11.7
IIw	534.1	76.7*	394.7	9.7	86.4
IIIw	146.6	6.2	99.8	0.0	6.2
IVw	216.5	52.5	220.7	15.9	68.4
V	45.0	11.1	119.4	14.1	25.2
TOTAL	1269.8	158.2	888.0	39.7	197.9

<sup>1/</sup>CLASS I SOILS ARE NORMALLY CONSIDERED WELL DRAINED; HOWEVER,  
BECAUSE OF TOPOGRAPHY, WETNESS PROBLEMS MAY EXIST IN SMALL AREAS

\* INCLUDES 11,700 ACRES ON IRRIGATED CROPLAND

SOURCE: 1982 NRI

Table 5-22

DRAINAGE NEEDS ON CROPLAND AND PASTURELAND, 1982,  
BY MLRA

MLRA	TOTAL CROPLAND	DRAINAGE NEEDED	TOTAL PASTURELAND	DRAINAGE NEEDED	TOTAL DRAINAGE NEEDS
-----1000 ACRES-----					
122	215.2	11.7	99.4		11.7
128	813.0	44.8	536.1		44.8
129/125	504.2	2.5	624.3	4.0	6.5
133A/152A	2407.5	61.0	1626.2	13.6	74.6
135	481.2	34.4*	656.1	22.1	56.5
136	89.2	3.8	274.5		3.8
-----					
STATE TOTAL	4510.3	158.2	3816.6	39.7	197.9

-----  
\* INCLUDES 11,700 ACRES ON IRRIGATED CROPLAND

SOURCE: 1982 NRI

### Other Conservation Treatment Needs - Pastureland

#### Pastureland Condition

In addition to erosion control and drainage needs, other pasture treatment needs were inventoried in the 1982 NRI. These were concerned with the quality and condition of the forage. Ratings of good, fair, or poor, were assigned indicating the degree or level of pasture management and the adaptability of grasses to the climate and soils. Descriptions of the three rating classes are outlined as follows:

Good -- Best suited plants are being used. There is moderate to high level fertility and good grazing management to insure maximum plant production and vigor. Pastures in this level of management need no additional treatment.

Fair -- Moderate level of management that allows grazing at an intensity which limits production to moderate levels. Fertilization is irregular and a continuous grazing system is in use. Rotational grazing and a planned fertility program are needed on these pastures.



Poor -- Improper pasture use and low level management. Plants are not well suited to climate and soil. Evidence of erosion and low fertility exists. Erosion control, reestablishment to recommended plants, a planned fertility program, and grazing management systems are needed on these pastures. Brush may also need to be controlled.

Table 5-23 and Figure 5-13, show the amount of Alabama's pastureland in each of the three rating classes by MLRA. On a statewide basis, 60 percent of Alabama's pastures rated fair or poor and 40 percent good. Pastures in the Highland Rim, MLRA 122, in extreme North Alabama, are the poorest in the state with 77 percent rated fair or poor. The Coastal Plain - Gulf Coast Flatwoods, MLRA 133A/152A, containing 43 percent of all the state's pastureland has the best overall pasture condition with 44 percent rated good.

Table 5-23

Alabama's Pastureland Condition, 1982, by MLRA

MLRA	Good	Fair	Poor	Total
-----1000 Acres-----				
122	23.3	35.1	41.0	99.4
128	214.4	213.6	108.1	536.1
129/125	252.5	253.4	118.4	624.3
133A/152A	720.3	573.1	332.8	1626.2
135	227.3	254.9	173.9	656.1
136	92.7	106.5	75.3	274.5
State Totals	1530.5	1436.6	849.5	3816.6

Source: 1982 NRI

Other Conservation Treatment Needs, Forest Land

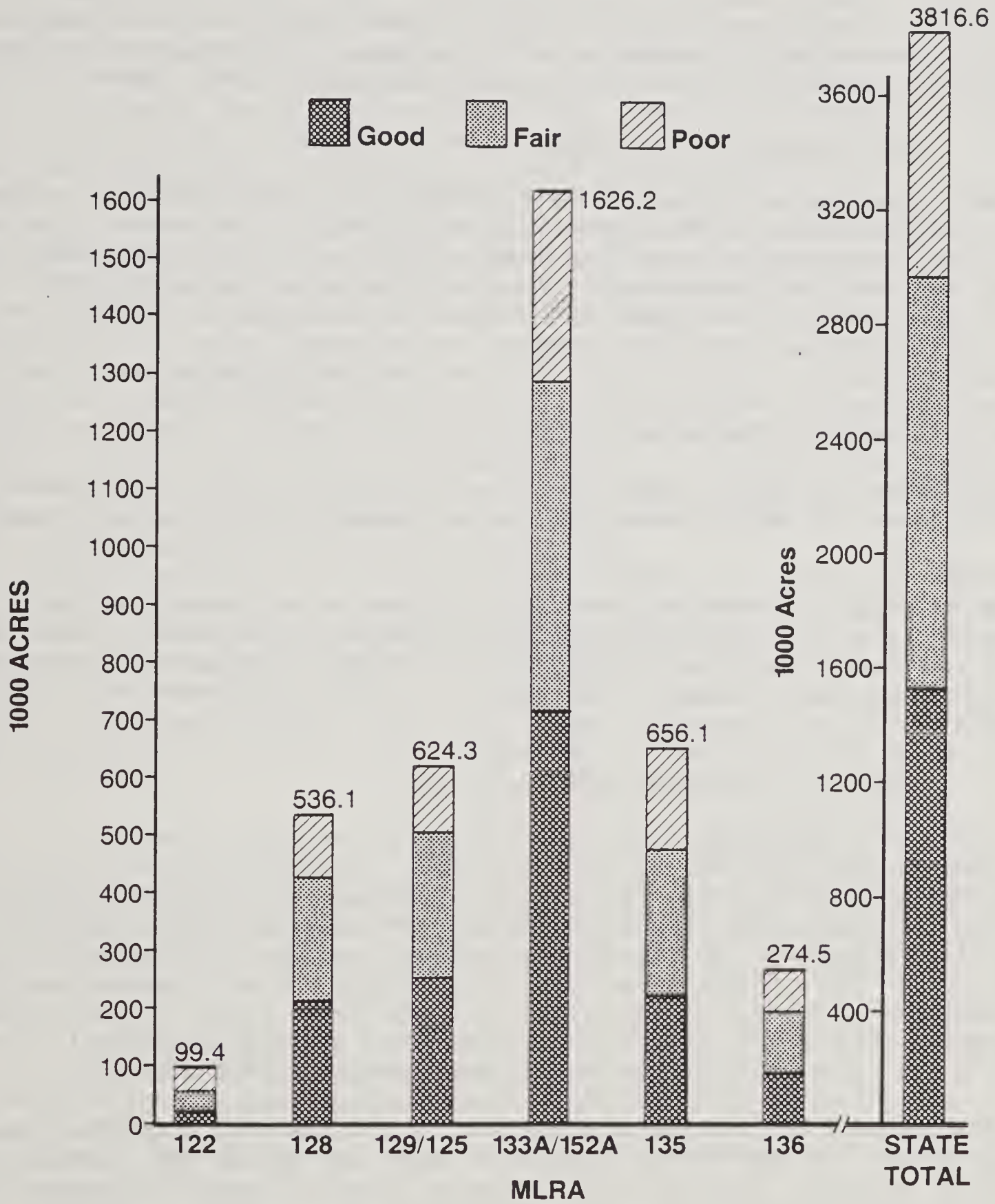
Forest Resource Condition

The stocking of growing-stock trees is less than optimum in many stands. There are 4,600,000 acres which are understocked (stands less than 60 percent stocked with growing-stock trees). In 1972, only 2,600,000 acres were understocked.

The area of cull stands (stands more than 60 percent stocked with cull trees) has increased to 1,600,000 acres, more than five times the 1972 estimate of 300,000 acres.

Figure 5-13

# Alabama's Pastureland Condition in 1982 by MLRA



Source: 1982 NRI



Statewide, 24 percent of all basal area is in cull trees. In 1972, only 18 percent was in cull trees. The largest increases in cull stocking have been in two forest types, loblolly-shortleaf pine, and oak-hickory.

There are limited differences in the average stocking of cull trees among ownerships. Forest industry lands contain the lowest cull stocking with 21 percent of all basal area. Public lands have the largest relative amount of cull trees, averaging 27 percent of all basal area. Non-industrial private timberland averages 25 percent basal area in rough and rotten trees.

### Forest Land Treatment Needs

The less than optimum growth rate on Alabama's forest land results from low stocking of desirable and fast growing tree species for the various sites. Some stands are understocked with growing stock trees, while other stands contain only relatively slow growing species. The advancing maturity of forests and the failure of many landowners to regenerate pine stands after harvest are principal underlying reasons for low growth rates. The acreages of seedlings and saplings are also declining because of the advancing maturity and lack of adequate regeneration. Growth rates average slightly less than 50 percent of the growth potential for fully stocked natural stands.

Hardwood sites are largely supporting stands of poor quality. It is estimated that 88 percent of the hardwood sites needs treatment for increased production.

Improvements in potential growth can also be made. Most research efforts in Alabama have been centered on improving the genetics of trees. Several private companies, as well as the Alabama Forestry Commission, are involved in this effort. Although the actual improvements in volumes produced in crop trees are yet to be determined, it may be an increase of about 20 percent over natural stands.

### Adequacy of Stocking, Desired Species

#### Pine Stands

There are two principal pine forest types in Alabama; (1) longleaf-slash, covering 1,377,600 acres, and (2) loblolly-shortleaf, covering 5,614,500 acres (see Table 4-7). Softwood growing-stock accounts for 69 percent of the basal area of these forest types, down only slightly from 71 percent in 1972. The remaining 31 percent of basal area in these forest types is mostly composed of hardwood trees. This amount of hardwood basal area on pine forest types suggests that pine stocking can be increased through hardwood control.

The establishment of pine plantations is a common intensive management practice in the South. The 1982 Forest Survey indicated approximately 26 percent (4,463,000 acres) of the pine sites had been subjected to a final harvest cut during the past 10 years. Some 33 percent of the harvested pine sites (1,465,000 acres) had been satisfactorily regenerated with pine seedlings. The Forest Survey data indicated that a total of 600,000 acres of plantations (primarily pine and more than 40 percent artificially regenerated) were established in Alabama during the 1963-1972 period. The estimate for the 1972-1982 period was 1,200,000 acres, a 200 percent increase.



Despite this increase in artificial regeneration, the number of small softwood trees has declined dramatically as Alabama's forests have matured and land-owners failed to regenerate pine stands after harvesting timber. The regeneration of pine stands after harvest represents a significant opportunity to increase productivity.

Growing space on pine sites, those classified physiographically as being suited to the growth of pine trees, is increasingly occupied by hardwoods and rough and rotten trees. Type conversion continues to represent an opportunity to increase timber productivity on pine sites. Pine sites comprise 17,300,000 acres or 84 percent of Alabama's timberland area. Pine forest types, however, occupy only 6,992,100 or 40 percent of these acres (see Table 4-7). The remainder of these pine sites support either the oak-pine type (4,276,200 acres) or the oak-hickory type (6,987,300 acres). While the feasibility of type conversion to pine from oak-pine and oak-hickory stands depends on specific stand conditions, associated costs, and ownership objectives, type conversion can be an efficient method of increasing timber production.

#### Hardwood Stands

Although hardwood forest types are extensive and occupy 9,328,800 acres, hardwood sites (those classified physiographically as being better suited to the growth of hardwoods) account for only 16 percent (3,500,000 acres) of the forest resource. Most of these sites are bottomland (2,500,000 acres), and there are 900,000 acres of upland hardwood sites.

The principal forest type on bottomlands is oak-gum-cypress. Of the total basal area in the oak-gum-cypress forest type, 29 percent is in rough and rotten trees, compared to only 22 percent in 1972. Much of the increase in cull tree basal area appears to be in the small diameter trees. Improvement cuttings, fuel wood cuttings, and timber-stand improvement operations which remove rough and rotten trees are obvious ways to improve the timber quality of these bottomlands.

Much of the growing space on the 6,987,300 acres of the oak-hickory forest type is occupied by cull trees. Thirty percent of the basal area of these stands is in rough and rotten trees. The removal of cull trees can improve productivity. The more intensive type conversion treatments maximize productivity, but require large investments and might adversely affect wildlife and other nontimber values.

#### Mixed Stands

The oak-pine forest type occupies almost 4,276,200 acres of pine sites. One-quarter of the growing space in these stands is occupied by rough and rotten trees. The average oak-pine stand has 37 percent of its basal area in softwood growing-stock.

Although productivity for most of these stands can be increased to full potential by stand conversion, this treatment may not be economically attractive for many landowners. Where stand conversion is not feasible, pine production can be increased by removing low value hardwoods and cull trees.

### Timber Mortality

The 1982 Forest Survey indicated a periodic average mortality of 196.5 million cubic feet of timber. This mortality reduces net growth and timber inventories. This volume of timber mortality amounts to 24 percent of the removals from growing-stock or one percent of the total growing-stock volume. The lowest total mortality occurred in the North and Southwest-South Regions, with the highest in the Southeast Region (Table 5-24).

Table 5-24

Mortality of Growing-Stock on Nonfederal <sup>1/</sup>  
Forest Land by Species Group and Region, 1982

Region	All Species	Softwood	Hardwood
-----million cubic feet-----			
Southwest-South	25.6	12.4	13.2
Southwest-North	28.5	14.1	14.7
Southeast	48.3	28.1	20.5
West Central	39.5	25.6	13.9
North Central	38.6	29.5	9.2
North	15.0	6.3	8.9
Totals	196.5	116.3	80.2

<sup>1/</sup> Totals may not add due to rounding.

Source: USDA Forest Service, Alabama Forest Survey, 1982

Due to the varying area of commercial forest land in each region, the average mortality of growing-stock per acre presents a slightly different situation when viewed on a region level. Table 5-25 indicates that the North Region has the least problem with mortality on a per-acre basis, while the West-Central Region appears to have the highest mortality rate. Most of the regions, however, are close to the state average mortality rate.

In addition to timber mortality, insects, disease, fire, and storm effects cause a detrimental impact on the timber resources due to reductions in growth rates, loss of roundwood volumes, destruction, survivability of tree seedlings, and destruction of tree seed. There have been no estimates of the total impact all the destructive effects have on the timber resource, but they are likely substantial.

Storm losses also affect the timber resources to a considerable degree. Several ice storms, tornadoes, hurricanes, and other high winds have caused notable change in recent years, but no efforts have been made to estimate damage from most such storms. However, the great destruction caused by Hurricane Frederic in 1979 did prompt estimations of damages.



An estimate made by the Southern Forest Experiment Station from field data provided by the Alabama Forestry Commission indicated 125.6 million cubic feet of timber was damaged with a possible value of \$68 million. These timber volumes represented at least 15 percent of the annual timber harvest in 1974.

Table 5-25  
Average Mortality of Growing-Stock  
Per-Acre by Species Group and Region, 1982

Region	All Species	Softwood	Hardwood
-----cubic feet per acre-----			
Southwest-South	9.17	4.44	4.73
Southwest-North	8.57	4.20	4.37
Southeast	9.17	5.30	3.87
West Central	12.76	8.27	4.49
North Central	9.34	7.12	2.22
North	7.52	3.12	4.40
State Average	9.49	5.62	3.87

Source: USDA Forest Service, Alabama Forest Survey, 1982

#### FLOOD DAMAGES

Storms over Alabama are usually of the frontal type occurring in the winter and spring, lasting from 3 to 5 days. The axis of frontal type storms generally move across the state in such manner that a flood in one hydrologic basin is not accompanied by a flood in other basins. Most summer storms are of the thunderstorm type with high intensity over small areas, producing serious local floods. Five to six inches of intense rainfall in 24-hours are required to produce an extensive flood on any one of the major river basins in the state. On many tributaries one to three inches of intense rainfall, which may occur several times a year, are sufficient to produce local floods.

Significant flood damages occur along the state's rivers and tributaries each year when streams flow out of their banks. Since flood plain soils are some of the more productive soils, large acreages of cropland and pastureland are found within the flood plain (435,300 acres cropland and 386,900 acres pastureland in Alabama in 1982). Flood damages to crops and pasture represent a major economic loss to Alabama's agricultural producers each year. The flood plain land use data shown in Chapter 4, Table 4-23 and in Appendix D, have been used to estimate annual flood damages to Alabama's cropland and pastureland. These damages totaled \$14.1 million for cropland and \$1.2 million for pastureland and are shown for the States' seven hydrologic subregions in Table 5-26. County data is given in Appendix D.



Table 5-26

FLOOD DAMAGES BY HYDROLOGIC SUBREGION  
WITHIN ALABAMA, 1982\*

HYDROLOGIC SUBREGION	DRAINAGE AREA (ac.)	FLOODPLAIN TYPE	-----AVERAGE ANNUAL FLOOD DAMAGES-----			SUB-W/S IN SUBREGION (NO.)
			TOTAL	CROPLAND	PASTURELAND	
313 APALACHICOLA	1,812,356	TRIBUTARY (ACRES)	14,900	7,100	7,800	30
		(DOLLARS)	265,000	242,000	23,000	
		RIVERINE (ACRES)	8,400	4,200	4,200	
		(DOLLARS)	177,000	164,000	13,000	
		-----				
		(ACRES)	23,300	11,300	12,000	
(DOLLARS)	442,000	406,000	36,000			
314 CHOCTAWHATCHEE ESCAMBIA	5,423,060	TRIBUTARY (ACRES)	11,900	3,200	8,700	107
		(DOLLARS)	160,000	134,000	26,000	
		RIVERINE (ACRES)	10,900	5,200	5,700	
		(DOLLARS)	177,000	160,000	17,000	
		-----				
		(ACRES)	22,800	8,400	14,400	
(DOLLARS)	337,000	294,000	43,000			
315 ALABAMA	11,048,412	TRIBUTARY (ACRES)	164,900	52,900	112,000	206
		(DOLLARS)	1,819,000	1,483,000	336,000	
		RIVERINE (ACRES)	134,000	86,900	47,100	
		(DOLLARS)	3,138,000	2,997,000	141,000	
		-----				
		(ACRES)	298,900	139,800	159,100	
(DOLLARS)	4,957,000	4,480,000	477,000			
316 MOBILE- TOMBIGBEE	10,123,977	TRIBUTARY (ACRES)	145,300	53,700	91,600	177
		(DOLLARS)	1,832,000	1,557,000	275,000	
		RIVERINE (ACRES)	86,200	57,500	28,700	
		(DOLLARS)	2,267,000	2,181,000	86,000	
		-----				
		(ACRES)	231,500	111,200	120,300	
(DOLLARS)	4,099,000	3,738,000	361,000			
317 PASCAGOULA	651,513	TRIBUTARY (ACRES)	1,600	1,400	200	16
		(DOLLARS)	19,000	18,000	1,000	
		RIVERINE (ACRES)	200	100	100	
		(DOLLARS)	4,000	4,000	0	
		-----				
		(ACRES)	1,800	1,500	300	
(DOLLARS)	23,000	22,000	1,000			

Table 5-26 (Continued)

FLOOD DAMAGES BY HYDROLOGIC SUBREGION  
WITHIN ALABAMA, 1982 \*

HYDROLOGIC SUBREGION	DRAINAGE AREA (ac.)	FLOODPLAIN TYPE	-----AVERAGE ANNUAL FLOOD DAMAGES-----			SUB-W/S IN SUBREGION(NO.)	
			TOTAL	CROPLAND	PASTURELAND		
602 MIDDLE TENNESSEE- HIWASSEE		TRIBUTARY (ACRES)	1,000	0	1,000		
		(DOLLARS)	3,000	0	3,000		
		RIVERINE (ACRES)	0	0	0		
		(DOLLARS)	0	0	0		
		-----					
		TOTAL	33,829	(ACRES)	1,000		0
		(DOLLARS)	3,000	0	3,000		
603 MIDDLE TENNESSEE- ELK		TRIBUTARY (ACRES)	190,400	122,300	68,100		
		(DOLLARS)	4,043,000	3,839,000	204,000		
		RIVERINE (ACRES)	52,500	40,800	11,700		
		(DOLLARS)	1,318,000	1,283,000	35,000		
		-----					
		TOTAL	4,334,959	(ACRES)	242,900		163,100
		(DOLLARS)	5,361,000	5,122,000	239,000		
STATE OF ALABAMA		TRIBUTARY (ACRES)	530,000	240,600	289,400		
		(DOLLARS)	8,141,000	7,273,000	868,000		
		RIVERINE (ACRES)	292,200	194,700	97,500		
		(DOLLARS)	7,081,000	6,789,000	292,000		
		-----					
		TOTAL	33,428,106	(ACRES)	822,200		435,300
		(DOLLARS)	15,222,000	14,062,000	1,160,000		

\* Acreage figures represent land areas within the boundaries of the State of Alabama. Watershed drainage units flowing into or out of the state have additional area not shown in the table. Coastal waters of Baldwin and Mobile counties are included in the drainage areas. Thus, the state's total area of 33,428,106 acres exceeds the U.S. Census Bureau figure of 33,091,067 which does not include these coastal waters. Floodplain acreages in this table are for the cropland and pastureland portion of the floodplain. Total floodplain areas within Alabama are shown in the floodplain use table in Chapter 4.

SOURCE: Floodplain Land Use, USDA-SCS, Auburn, AL

Figure 4-15 indicates that the northern and south-central portions of the state have potential for receiving the largest flood damages. Damage estimates are based on expansion of detailed flood damage investigations for selected watersheds in the state. Additional flood damages occurring to other flood plain land uses such as on-farm improvements, roads and bridges, urban areas, and industrial development were not evaluated as they vary significantly by watershed.

The Soil Conservation Service, Public Law 566 (PL-566), Small Watershed Program, has been utilized to reduce flood damages throughout the state. Three-fourths of all flood reduction projects in which construction is complete or in progress occur in the northern and south-central portions of the state where the largest flood plain acreages occur. The PL-566 program has completed flood protection work in 23 watersheds totaling 1,056,000 watershed acres. Within these 23 watersheds, there are 130,000 acres of flood plain land. Cropland and pastureland damages within these flood plains have been reduced on the average of 55 percent or \$724,000 annually. An additional 13 watersheds totaling 925,000 watershed acres have work in progress, that when completed, will reduce cropland and pastureland damages on 112,000 acres by \$821,000 annually.



## WATER

### WATER QUALITY

The water pollutants most frequently associated with agriculture are sediment, nutrients, pesticides, and animal wastes. Other agricultural-related pollutants include dead animals (principally poultry), drainage water from fish ponds, and the effluent from on-farm slaughterhouses. The extent to which these pollutants affect Alabama's waters is discussed briefly below. A more detailed discussion may be found in the Agricultural Runoff Management Plan, Alabama Water Improvement Commission, 1979.

#### Sediment

The U.S. Senate Committee on Agriculture and Forestry reports that, in terms of total mass, sediment is by far this nation's greatest water pollutant. In Alabama, sediment is likewise the primary pollutant from agriculture in terms of mass produced. It is more pervasive than the other pollutants, affecting streams, ponds, and lakes in all areas of the state. Sediment, however, is a more insidious pollutant than the others since its effects are not immediately obvious in most cases. Yet sediment can effect surface waters in several ways.

Sediment reduces fish populations by destroying their habitat. It can cover spawning beds, cover fish eggs, and prevent the development of bottom dwelling organisms which provide food for the fish. Suspended sediment reduces the transmittance of light into the water and, thus, reduces the process of photosynthesis. Where photosynthesis is reduced, aquatic life is diminished. Accumulations of sediment in a stream reduce the stream's carrying capacity and alter its flow characteristics. Sediment also fills lakes and ponds and reduces their use for fish production and recreation. Sediment is obviously a direct result of erosion. In Alabama, erosion on cropland and gully erosion are the principal sources of sediment. The regions of the state having the greatest possibility for water quality problems from erosion and sedimentation and the priority of these areas in the State Agricultural Runoff Management Plan are shown in Table 5-27 (see Figures 5-1 and 5-3, Agricultural Runoff Management Plan, AWIC, 1979).

#### Nutrients

Nutrients having the greatest effect on the aquatic environment are normally considered to be nitrogen and phosphorus. Commercial fertilizer and animal wastes are the usual sources of nutrients associated with agriculture. The major problem associated with nutrients in surface waters is eutrophication or the over-enrichment of a water body. Eutrophication results in luxuriant growths of algae (algae blooms) and other aquatic plants. A pond or lake covered with algae can ruin recreation and create tastes and odor problems when the reservoir is used for water supply. In addition, algae blooms can have a devastating effect on fish and other aquatic life: the dissolved oxygen, pH, and alkalinity become very unstable, changing drastically between day and night.

Table 5-27

POTENTIAL WATER QUALITY PROBLEM AREAS-RELATED TO SEDIMENT <sup>1/</sup>

Area	Location	Total Annual Erosion From Cropland and Gullies (thousand tons)	Square Miles of Total Land Area	Annual Erosion /Sq.Mi. (tons)	Priority <sup>2/</sup>
Tennessee Valley	Limestone - Lauderdale - Colbert - Lawrence - Morgan - Madison	11,858	3,867	3,066	1
Wiregrass	Geneva - Henry - Coffee - Houston - Barbour - Crenshaw - Dale - Pike Covington	18,632	6,134	3,037	2
Sand Mountain	DeKalb - Cherokee - Cullman - Blount - Marshall - Etowah - Jackson	12,701	4,894	2,595	3
Blackbelt	Sumter - Montgomery - Autauga - Bullock - Macon - Elmore - Russell - Hale - Greene - Pickens - Lowndes - Perry - Dallas - Marengo - Wilcox	21,511	11,221	1,917	4
East-Central Alabama	Chambers - Randolph - Lee - Clay - Calhoun - St. Clair - Talladega - Cleburne - Tallapoosa - Coosa	10,733	6,316	1,699	5
West-Central Alabama	Lamar - Marion - Franklin - Jefferson - Chilton - Shelby - Fayette - Tuscaloosa - Walker - Winston - Bibb	13,331	8,904	1,497	6
Southwest Alabama	Butler - Choctaw - Baldwin - Conecuh - Escambia - Clarke - Monroe - Mobile - Washington	9,925	9,643	1,029	7

Source: Agricultural Runoff Management Plan, Alabama Water Improvement Commission, 1979. (Erosion based on a 1975 update of 1967 Conservation Needs Inventory data. Does not necessarily reflect 1982 land use or erosion.)

<sup>1/</sup> Counties located within the problem area. Listed in order of priority. County with highest annual erosion per square mile of total land area within the county is listed first. County with lowest from within the area is listed last.

<sup>2/</sup> Priority ranking is based on severity of impact on water quality. Number one priority is area of most severe impact from sediment. Based on annual erosion from cropland and gullies occurring per square mile of total land area.



Nutrients can also affect ground waters. Although phosphorus is not generally subject to leaching, nitrogen in the nitrate form is highly soluble and leaches readily. If the nitrate nitrogen in soil exceeds that required by the plant, leaching of the soluble nitrate can occur. High levels of nitrate in ground water can adversely affect humans, especially babies. Nitrate can interact with the blood in such a way that oxygen is not effectively transported in the circulatory system. In infants this can result in a disease called methemoglobinemia or "blue baby syndrome."

Pollution from nitrogen and phosphorus can be found in a number of areas across the state. However, three large regions of the state have been identified in the State Agricultural Runoff Management Plan as being especially prone to nutrient pollution. (See Figure 5-5, Agricultural Runoff Management Plan, AWIC, 1979.) The first is a broad band extending for about 25 miles on both sides of the Tennessee River from Northeast Alabama to the Wilson Reservoir in North Central Alabama. The main problem in this area is high nitrogen levels, typically ranging from 2.0 to 3.0 mg/l in surface waters.

The second area of concern is the Blackland Prairies, MLRA 135, extending as a band across the center of the state. Phosphorus pollution is a potential problem throughout the area. In addition, isolated regions within this band have some of the highest nitrogen concentrations in the state (3.0 to 5.0 mg/l).

The third major area having potential nutrient problems is the Wiregrass region within the Coastal Plain, MLRA 133A. Phosphorus in the range of 0.07 to 0.1 mg/l is typical of streams in this region.

When animal wastes are the source of nutrient pollution, the nitrogen and phosphorus values could exceed 100 mg/l. Nitrogen at these high levels can kill fish due to ammonia toxicity.

### Pesticides

Pesticides are used extensively in agriculture throughout the state. The most widely used classes of pesticides are the insecticides, herbicides, and fungicides.

Based on 19 years of monitoring and investigation of fish kills in the state, the Alabama Pesticide Laboratory has found that no mean-level concentrations of toxic pesticides above FDA-established tolerances exist in any Alabama streams. Instead, research shows that the quantity of pesticides in surface waters is greatest when heavy rains occur soon after application; the concentrations decrease rapidly thereafter. Except when heavy rainfall occurs shortly after application, concentrations are usually very low. The total amount of pesticides that are transported off the land during the crop year is usually less than 5 percent of the amount applied. <sup>1/</sup>

<sup>1/</sup> The Syntectics Group, Inc., Pesticides, Tillage Practices and Water Quality: An Annotated Bibliography. Washington, D.C. (1984); Prepared for the USDA-Soil Conservation Service.



The following conclusions regarding pesticide pollution in the state are presented in the State Agricultural Runoff Management Plan:

1. Fish kills are a significant problem. Fish kills are caused by heavy concentrations of a pesticide entering a stream. The heavy pesticide loading is usually of short duration with no permanent effects.
2. Most pesticide-related fish kills are caused by either improper application, mishandling of application equipment, or heavy rains occurring soon after application. Improper aerial application is the most serious problem.
3. Endrin, malathion, toxaphene and, to a lesser extent, chlordane have been the pesticides primarily associated with fish kills. Except for malathion, all of these are transported primarily by sediment in runoff.
4. The majority of the fish kills occurs in areas of cotton production.

The State Agricultural Runoff Management Plan identified two geographic areas with the greatest possibility for pollution from pesticides. One is in the northwest corner of the state and the other is in the center of the state. These are shown in Table 5-28.

Table 5-28  
Counties With Highest Potential for Water Quality Problems  
Related to Pesticides

---

Priority 1	
Colbert	Limestone
Lauderdale	Madison
Lawrence	Morgan
Priority 2	
Autauga	Elmore
Dallas	Lowndes

---

## Animal Wastes

Pollution from animal wastes has become a serious problem in the state. The Alabama Department of Environmental Management (ADEM) is responding to more complaints related to animal wastes each year. Some complaints are attributed to animal wastes crossing property lines and to wastes causing fish kills, either in a stream or in a neighbor's pond. The largest number of complaints is occurring in the Northeast to North-Central part of the state. Other scattered complaints were reported elsewhere in the state. The complaints to ADEM substantiate the findings in the State Agricultural Runoff Management Plan study which identified the Sand Mountain area of Northeast Alabama as the primary area with potential water quality problems from animal wastes. While the State Agricultural Runoff Management Plan identifies sediment and nutrients as the top two priority items among agriculture-related pollutants, the agriculture-related complaints addressed to ADEM in recent years were almost exclusively associated with animal wastes.

Several state and federal agricultural agencies recently conducted a study to determine the extent of pollution from livestock and poultry facilities in Alabama. Their report concluded that 63 percent of existing waste management systems have a high potential for polluting nearby streams. Approximately 1,100 waste management systems have been installed with SCS assistance since 1969, but about one-half of these are assumed to be no longer in operation. Therefore, it is estimated that about 350 existing systems are probably polluting nearby streams at some time each year. Moreover, there are an estimated 2,100 hog operations in the state which have no waste management system, and countless other dairies, beef feedlots, and poultry facilities having either no waste management system or inadequate systems.

If pollution from all of these potential sources affect only one-fourth mile of stream, it is conservatively estimated that more than 1,000 miles of Alabama's streams are polluted by animal wastes at some time each year. The adverse effects of animal wastes include high bacteria concentrations, nutrient levels high enough to kill fish, eutrophication of ponds and lakes, and organic loadings that deplete oxygen levels in water.

## SEDIMENT DAMAGE

Total rural land erosion in the state and the destination of that eroded material as sediment is shown in Table 5-29. This accounts only for the erosion/sediment produced in Alabama. No attempt was made to estimate incoming sediment, but the sediment that moves out-of-state is estimated as "export".

Much of the eroded material (an estimated 45 percent - 77 million tons), becomes local sediment which is deposited on uplands and in farm ponds (see Table 5-30). Some eroded material smothers crops along the lower parts of fields, fills road ditches, and clogs drainageways. Timber harvest and reforestation are adversely affected by muddy roads, ditches, and gullies that interfere with tree planting and timber harvest.

Table 5-29  
Erosion and Sediment by Hydrologic Subregion, 1982

Hydrologic Subregion	Drainage Area 1,000 Acres	Erosion <u>1/</u>	-----Sediment----- Trapped      Export	
			-----1,000 Tons-----	
313 Apalachicola	1,812.3	4,474.9	643.7	349.1
314 Choctawhatchee-Escambia	5,423.2	17,825.8	400.0	3,225.4
315 Alabama	10,280.7	53,331.4	10,295.3	- <u>2/</u>
316 Mobile-Tombigbee	10,645.7	75,005.9	14,246.0	2,832.6
317 Pascagoula	560.4	1,172.9	32.7	283.7
602/603 Tennessee	4,368.8	19,811.5	3,292.5	1,005.7
State Total	33,091.1	171,622.4	28,910.2	7,696.5

1/ Total erosion includes all 1982 NRI erosion and estimated erosion from built-up, federal lands, roads, etc., not reported in 1982 NRI.

2/ Area draining to Alabama River downstream from Claiborne Lock and Dam included with Mobile-Tensaw.

Source: 1982 NRI



Table 5-30

## Summary of Erosion and Sediment Deposition, Alabama, 1982

Source of Erosion	Erosion	Deposits On Uplands And In Farm Ponds 1/	Flood Plains Streams & Small Reservoirs	Large Reservoirs & Inland Waterways	Export
-----Million Tons-----					
Cropland 2/	40.6	20.3	12.8	5.7	1.8
Pastureland	2.7	1.3	.8	.4	.2
Forest Land	12.0	5.9	3.8	1.7	.6
Minor Land Use	44.0	22.1	13.7	6.2	2.0
Other Lands 3/	47.1	21.2	12.6	11.3	2.0
Critical Areas 4/	25.2	6.3	14.2	3.6	1.1
Total	171.6	77.1	57.9	28.9	7.7

1/ Eroded material deposited near the source of erosion; not generally accounted as "sediment".

2/ Cropland erosion includes ephemeral gully erosion.

3/ Built-up, roads, and federal lands (estimated).

4/ Gullies, streams, roads and major construction.

Source: 1982 NRI

Sediment often enters streams and rivers and damages water quality, reduces streamflow capacity, and increases flooding. Sediment deposited on fertile flood plains reduces crop productivity. It is estimated that 95 million tons (55 percent) of the eroded material from Alabama lands enters streams and reservoirs. About 2.8 million tons reaches Mobile Bay. The remainder that leaves the state (5 million tons) is carried by the other major stream systems.

Waterways in the state that have navigation channels are regularly maintained by sediment removal. These include the Tombigbee, Black Warrior, and Alabama Rivers, portions of the Mobile River system, including Mobile Bay, and the Chattahoochee portion of the Apalachicola River system. Other Alabama rivers flowing to the Gulf of Mexico through Florida and Mississippi produce troublesome amounts of sediment but are not major developed waterways (Appendix Table C-9).

The Tennessee River drainage area in Alabama, which comprises about 13 percent of the state, has a high erosion rate but sediment is not presently a navigation problem. This is due to the extensive system of reservoirs with large multiple-purpose capacity and conservation treatment programs applied to the land in past years. Eroded soil is either retained on the land or is trapped in upstream reservoirs, but is not presently nor in the foreseeable future, a removal problem.

The Mobile River's system delivers 5.1 million tons of sediment annually to Mobile Bay. Alabama's lands are producing about 55 percent of this sediment. The sediment yield to the Bay originates as 177 million tons of erosion in Alabama, Mississippi, Georgia, and Tennessee; about one ton in 35 reaches Mobile Bay. A large portion of this sediment flushes out to the gulf or is deposited in ship channels and on fishing, shrimping and oyster harvesting grounds in Mobile Bay, Mississippi Sound, and adjacent waters. The U.S. Corps of Engineers annually spends about \$4.5 million to remove some 3 million tons of sediment from Mobile Harbor and Ship Channel. About half of this sediment is new material transported to the harbor and channel by the Alabama and Tombigbee Rivers. Cost of removal of this 1.5 million tons of new sediment is about \$2.25 million. For every 35 tons of erosion prevented; one ton of sediment is prevented from reaching Mobile Bay; this saving has beneficial effects throughout the stream system of the basin and also saves \$1.50 per ton for dredging in Mobile Harbor.

Other sediment removal costs are proportional to the erosion and size of the source area. The U.S. Corps of Engineers annually spends \$8.5 million to remove 9 million tons of sediment from other Alabama inland waterways, a cost of \$0.93 per ton of sediment removed.

Most of Alabama's towns and cities depend on surface water supplies. About 60 municipalities use reservoirs and others take their water from streams. Sediment must be filtered or settled out of the water at treatment plants, but this is a small portion of the true cost of sedimentation. Small reservoirs fill with sediment at an average annual rate of 1.3 acre feet (1,100 tons) per square mile of drainage area. They usually have excess capacity built in, but eventually the sediment must be removed or a new reservoir constructed. Small reservoirs now cost about \$600 per acre foot of storage; therefore, sediment from one square mile of drainage area displaces \$780 worth of water. Reduction of erosion makes extra water available, as well as all the other beneficial effects of saving the soil. For instance, in a reservoir drainage area, reducing the erosion rate from 10 to 5 tons per acre per year on a single 40-acre field saves 5,000 tons of erosion in 25 years, a damage reduction of \$600 (one acre foot of sediment), or \$0.12 per ton of soil saved. This saving is attributable to reservoir sediment reduction and is in addition to other erosion and sediment reduction benefits.

Other sediment damages cannot be readily assessed monetarily. For example, a transitory sediment substrate in a stream or bay reduces fish reproduction, but the value of the fishery that is foregone cannot be completely assessed in dollars.

## CHAPTER 6

### LAND AND WATER RESOURCE TRENDS

#### LAND USE

Over the last 25 years, Alabama's overall land use has changed very little. Population has grown at a moderate rate and established population centers have expanded. Limited growth has occurred along major transportation corridors. The combined acreage in cropland and pastureland declined about 9 percent between 1958 and 1982. Cropland acreage declined steadily over most of this period, with an increase in the late 1970's and a continuation of the decline after 1980. Pastureland acreage increased through the mid-1970's but has declined in recent years.

Table 6-1 shows the changes in land use and water area in Alabama between 1958 and 1982. Caution should be used in directly comparing information from one time period to another. Comparability is affected by several procedural and technological improvements in data collection and statistical estimation processes and by changes in definitions.

#### Erosion Changes 1977-1982

Comparable estimates of erosion are only available for 1977 and 1982 (Table 6-2). The data indicates that sheet and rill erosion on cropland, pastureland, and forest land declined during this period. More significantly, average rates per acre are also down. The annual soil loss from cropland, pastureland, and forest land dropped 20 percent during this 5-year period. Non-agricultural erosion cannot be compared because of inventory differences.

The shift of cropland from sloping, shallow soils to less sloping land, along with a large increase in conservation tillage within the last decade, has significantly reduced the statewide average annual erosion rate on cropland (Table 6-3). Acreage in subclasses "e" and "s" on land capabilities IV through VII dropped from 16 percent to 11 percent of total cropland from 1967 to 1982. Cropland on "w" subclasses is up from 13 percent of total cropland to 20 percent over the same period. Both movements tend to reduce cropland erosion.



Table 6-1  
Land and Water Area in Alabama, 1958 to 1982

Land Use	1958	1967	1977	1982
-----1,000 Acres-----				
Cropland	5863	5114	4499	4510
Pastureland	3074	3487	4122	3817
Forest Land	20100	20838	19792	20633
Minor Uses	NA*	NA*	713	736
Urban & Built-Up	1016	1364	1594	906
Rural Transportation	NA*	NA*	605	639
Small Water	138	154	228	312
Census Water	352	434	596	633
Federal Land	908	935	876	904
Total	-	-	33030	33091

\* Comparable data not available, note accompanying discussion.

Source: 1958 and 1967 CNI, and 1977 and 1982 NRI

Table 6-2  
Sheet and Rill Erosion on Agricultural and  
Forest Land in Alabama, 1977-1982

Land Use	-----1977-----		-----1982-----	
	1000 Tons	Tons/Acre	1000 Tons	Tons/Acre
Sheet and Rill Erosion (Cultivated Cropland)	37,628	9.9	31,887	7.6
All Cropland	39,937	8.9	32,183	7.1
Pastureland	3,656	0.9	2,690	0.7
<u>Forest Land</u>	<u>15,307</u>	<u>0.8</u>	<u>12,010</u>	<u>0.6</u>
Total	58,900	---	46,883	---

Source: 1977 and 1982 NRI

Table 6-3

## CROPLAND IN ALABAMA, 1967-1982, BY LAND CAPABILITY CLASS AND SUBCLASS

CLASS/ SUBCLASS	1967	1977	1982
	-----1,000 ACRES-----		
I	477	373	328
IIe	1735	1488	1607
IIs	63	92	88
IIw	416	500	534
IIIe	1002	921	787
IIIs	313	289	260
IIIW	172	216	147
IVe	419	248	239
IVs	140	69	89
IVw	89	112	216
Vw	13	37	45
VIe	134	116	86
VIs	40	23	35
VIIe	49	7	33
VIIIs	52	8	16
VIIW			
STATE TOTAL	5114	4499	4510

-----  
SOURCE: 1967 CNI, 1977 AND 1982 NRI

## CONSERVATION TREATMENT

The level of land management in Alabama appears to be improving. The 1967 CNI was the first comprehensive resource survey to evaluate the current needs for conservation land treatment. Subsequent resource surveys made in 1977 and 1982 continued to evaluate the current status of conservation treatment. Comparison of conservation treatment needs in 1967 and 1982 indicates that progress is being made in all major land uses (see Table 6-4 and Figure 6-1).

Between 1967 and 1982, total cropland in Alabama decreased about 600,000 acres. These reductions occurred primarily on eroded and shallow, sloping soils. This shift to less erosive soils, coupled with a modest conversion to cropland on relatively flat "wet" soils, resulted in a marked increase in conservation protection. In addition, a significant increase in conservation protection has taken place on crops remaining on the sloping land. For instance, the percentage of adequately-protected cropland on Land Capability Classes IIe to IVe soils increased from about 17 percent in 1967 to 25 percent in 1982.

The level of adequately-protected pastureland also showed significant progress during the 15-years from 1967 to 1982, improving from about 21 percent adequately-protected in 1967, to 49 percent in 1982. This increase occurred on all land capability classes, even on steeper slopes. Management practices contributing to the increase in protection include the planting of improved pasture grasses, a higher level of pasture fertilization, and increased awareness of the problems of overgrazing.

The level of management on forest land has also improved. The acreage of forest land adequately-protected increased 9 percent from 1967 to 1982. Most forest land is adequately protected from erosion, but nearly 67 percent of Alabama's forest land needs some type of conservation treatment, either timber establishment or timber stand improvement (Table 6-4).

## FOREST RESOURCE TRENDS

The supply of timber has been increasing in Alabama over the past several decades. Inventories show that between 1963 and 1982, there was a 50 percent increase in growing-stock inventories. Most of this increase occurred prior to 1972; there was only a 7 percent increase from 1972 to 1982. During the period 1972 to 1982, there was an increase of over 1,300,000 acres in oak-hickory forest types, while pine and oak-pine forest types decreased over 1,000,000 acres. This trend is expected to continue unless forest landowners do a better job of regenerating pine forest sites (Table 6-5).

According to timber severance tax data and the Forest Service's pulpwood production data, large increases in the output of forest products have occurred in the past three decades. In 1982, more than 1.8 billion board feet of lumber were produced, an increase of 52 percent over 1957. All of the increase in lumber production has been in the pine species, with hardwood lumber output actually declining 12 percent from 1957 to 1982 (Figure 6-2).



Table 6-4

TRENDS IN CONSERVATION TREATMENT, 1967-1982, BY LAND CAPABILITY CLASS AND SUBCLASS GROUPINGS

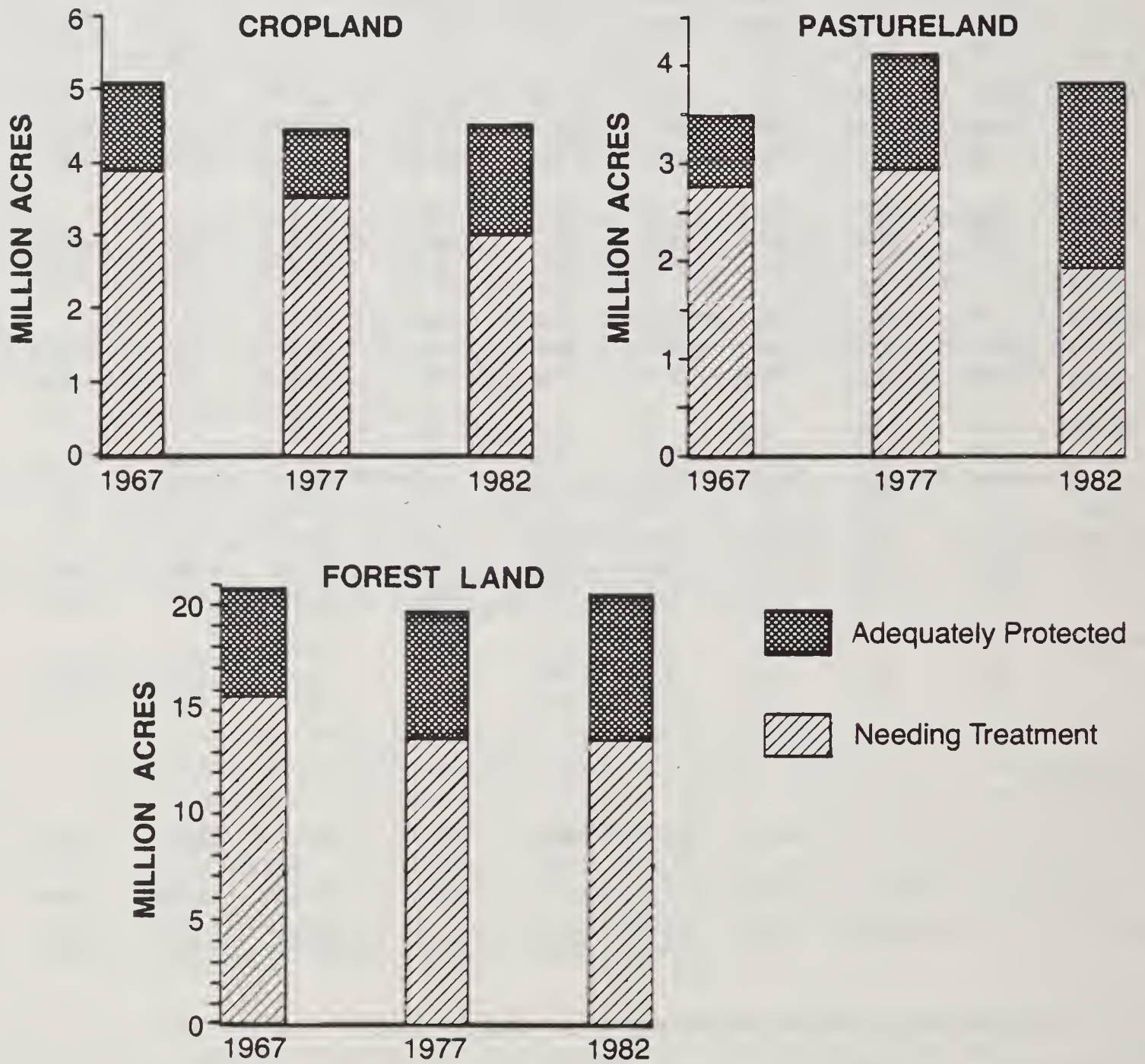
CLASS/ SUBCLASS		CROPLAND			PASTURELAND			FOREST LAND <sup>1/</sup>		
		TOTAL	NEEDING	ADEQUATELY	TOTAL	NEEDING	ADEQUATELY	TOTAL	NEEDING	ADEQUATELY
		CROPLAND	TREATMENT	PROTECTED	PASTURELAND	TREATMENT	PROTECTED	FOREST LAND	TREATMENT	PROTECTED
-----1000 ACRES-----										
I	1967	477.3	162.9	314.4	109.6	68.6	41.0			
	1977	373.0	159.0	214.0	85.0	37.0	48.0	121.0	100.0	21.0
	1982	327.5	142.5	185.0	53.4	14.3	39.1	153.9	96.4	57.5
IIe-IVe	1967	3155.5	2625.4	530.1	1714.1	1319.4	394.7			
	1977	2657.0	2294.0	363.0	2386.0	1619.0	767.0	5000.0	3360.0	1640.0
	1982	2633.2	1974.8	658.4	2129.7	1006.0	1123.7	5370.4	3475.5	1894.9
IIw-IVw	1967	677.2	505.3	171.9	903.9	737.9	166.0			
	1977	828.0	611.0	217.0	769.0	624.0	145.0	2276.0	1605.0	671.0
	1982	897.2	538.1	359.1	715.2	362.2	353.0	2325.9	1401.8	924.1
IIs-IVs	1967	516.4	382.9	133.5	224.0	167.8	56.2			
	1977	450.0	294.0	156.0	243.0	144.0	99.0	1046.0	551.0	495.0
	1982	436.3	195.0	241.3	213.4	100.9	112.5	1121.6	658.5	463.1
V & VIIw	1967	13.5	12.5	1.0	53.1	45.2	7.9			
	1977	37.0	30.0	7.0	158.0	99.0	59.0	1903.0	1131.0	772.0
	1982	45.0	15.7	29.3	122.4	82.6	39.8	1996.2	1257.1	739.1
VIe & VIIe	1967	182.1	134.1	48.0	353.6	317.8	35.8			
	1977	123.0	123.0	0.0	422.0	365.0	57.0	6940.0	5094.0	1846.0
	1982	119.5	89.4	30.1	442.0	280.3	161.7	6918.5	4771.0	2147.5
VIs & VIIs	1967	91.9	86.1	5.8	129.0	110.2	18.8			
	1977	31.0	23.0	8.0	59.0	45.0	14.0	2506.0	1888.0	618.0
	1982	51.5	31.5	20.0	140.5	81.6	58.9	2746.8	2017.8	729.0
STATE TOTALS										
	1967	5113.9	3902.2	1204.7	3487.3	2766.9	720.4	20837.6	15719.0	5118.6
	1977	4499.0	3534.0	965.0	4122.0	2933.0	1189.0	19792.0	13729.0	6063.0
	1982	4510.3	2987.0	1523.3	3816.6	1927.9	1888.7	20633.3	13678.1	6955.2

<sup>1/</sup> 1967 CNI DID NOT PROVIDE FOREST LAND TREATMENT NEEDS BY LAND CAPABILITY CLASSES.

SOURCE: 1967 CNI, 1977 AND 1982 NRI

Figure 6-1

### Trends in Conservation Treatment, 1967-1982



Source: 1982 NRI

Table 6-5  
Forest Type Changes, Nonfederal Forest Land  
Alabama, 1972-1982

	1972	1982	Change
-----1,000 Acres-----			
Longleaf-Slash Pine	1,394.6	1,377.6	-17.0
Loblolly-Shortleaf Pine	6,172.3	5,614.5	-557.8
Oak-Pine	4,788.5	4,276.2	-512.3
Oak-Hickory	5,679.8	6,987.3	+1,307.5
Oak-Gum-Cypress	2,401.8	2,273.3	-128.5
Elm-Ash-Cottonwood	90.3	68.2	-22.1
Non-Typed		36.2	+36.2
Totals	20,527.3	20,633.3	+106.0

Source: USDA Forest Service, Alabama Forest Survey, 1982

Pulpwood production since the 1950's has risen phenomenally. In 1957, round pulpwood production amounted to only 2.1 million cords, with an almost negligible amount of wood residues utilized at that time. By 1981, round pulpwood production had risen 217 percent to 6.4 million cords, with an additional 2.2 million cords of plant by-products also being utilized for pulpwood (Figure 6-3). In 1957, hardwoods accounted for only 6 percent of the total round pulpwood production, while in 1982, hardwoods accounted for almost 30 percent. In 1982, approximately one-fourth of the total pulpwood production was from the use of timber by-products.

Stumpage prices have risen significantly in recent years. In addition to the effect of inflation, Southern Pine sawtimber experienced a real price increase of around 2.1 percent between 1967 and 1984.

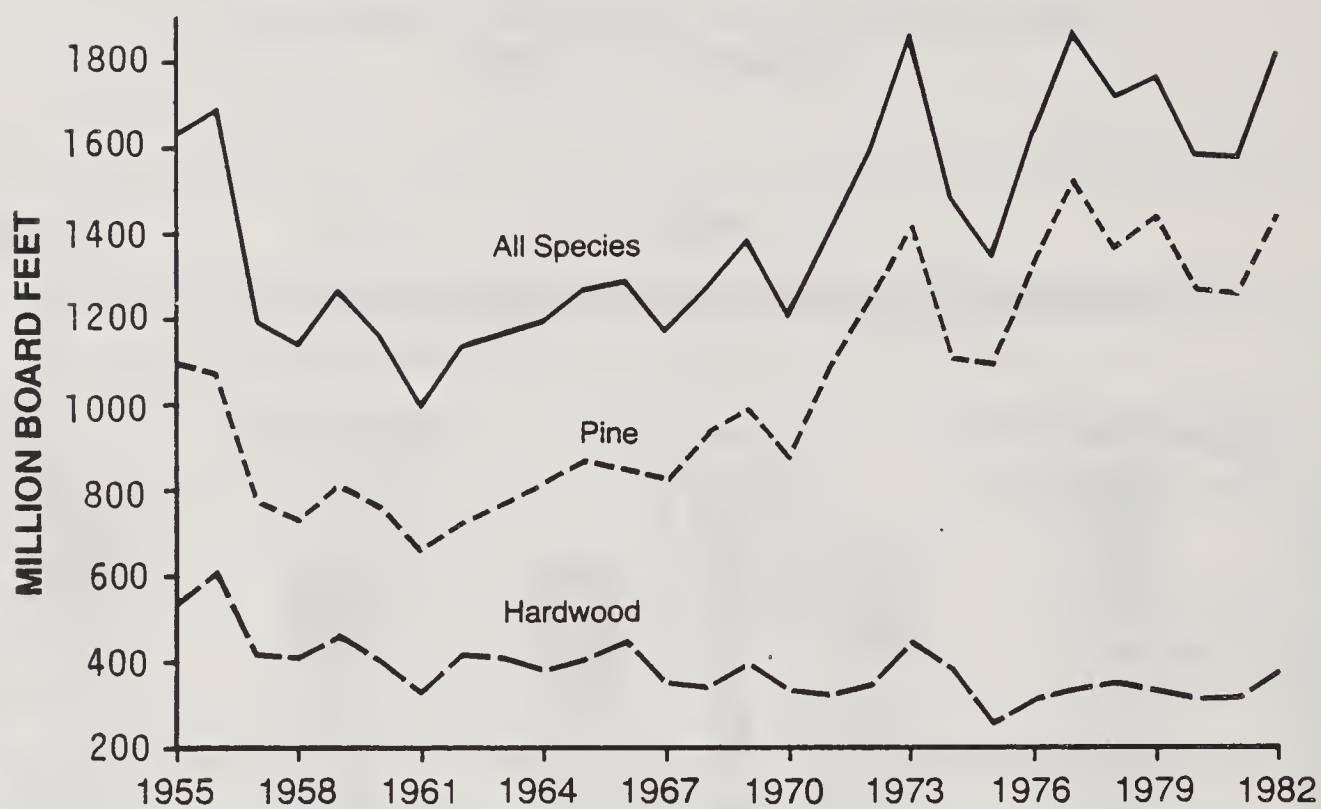
Even though timber inventories have been increasing, the percent of the net annual growth cut each year has been increasing steadily. The 1972 Forest Survey indicated that 63 percent of net growth was harvested in that year. The 1982 survey estimated that 87 percent of the annual growth was being harvested (see Table 4-13).

Although no analysis has been done specifically for Alabama to show the future timber demand at various price assumptions, several studies have been conducted for both the nation and the south. The Forest Service, in its most recent assessment, estimates that even with rising timber prices demand for softwood



Figure 6-2

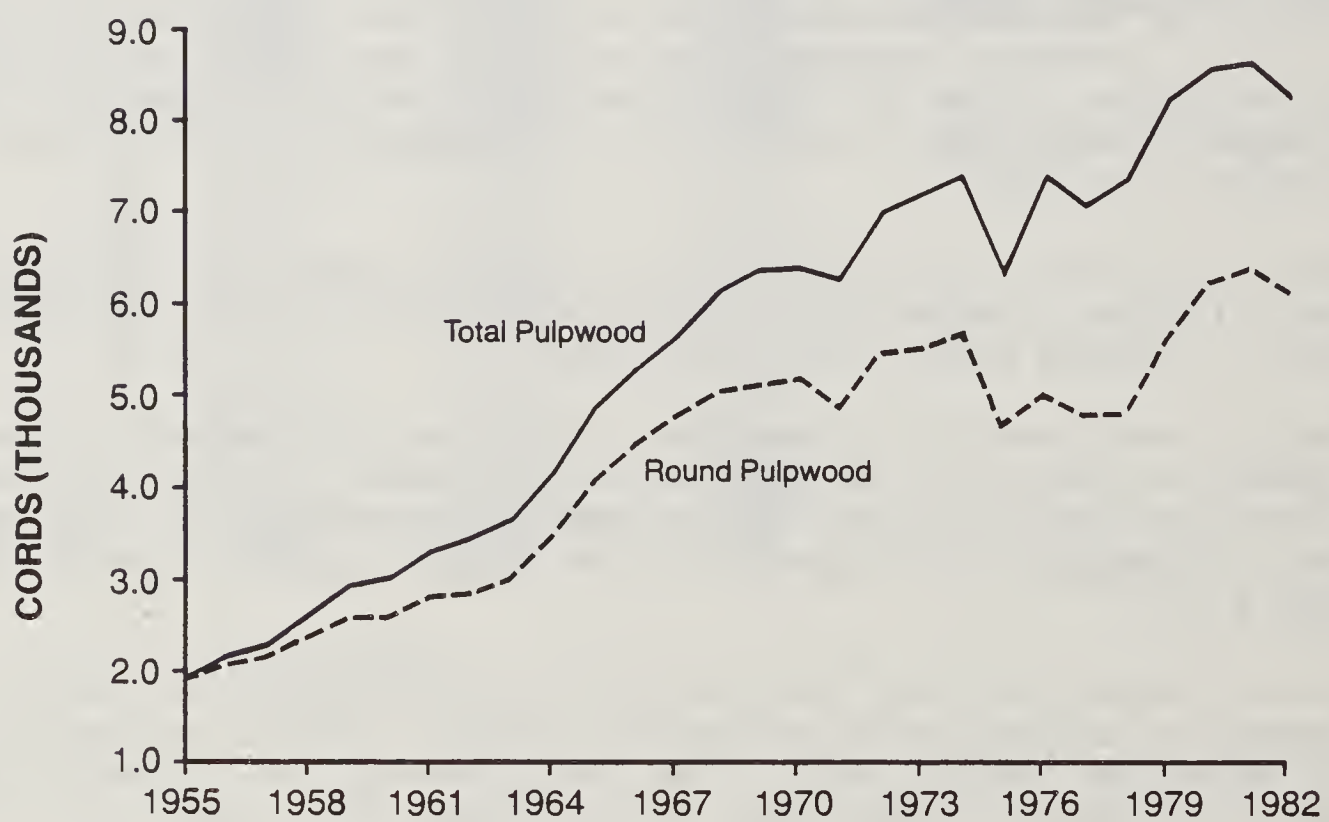
### Lumber Production by Species Group, 1955-1982



Source: Severance Tax Reports, State of Alabama

Figure 6-3

### Round & Pulpwood Total Production, 1955-1982



Source: Southern Pulpwood Annual Report—USDA Forest Service

timber in 2030 will be 63 percent higher than in 1976 in the South-Central region of the United States. It is reasonable to assume that a similar analysis for Alabama would indicate demand levels at least as high as the composite level for these eight states, since Alabama currently supplies almost one-quarter of the timber removals in this region. The U.S. analysis of softwood demands assume a real price increase of 2.5 percent annually throughout this century.

#### FLOOD PLAIN LAND USE

Flood plain land use data developed by SCS from 1980 to 1982, are not comparable to any previous inventory data, consequently, long-term trends in flood plain land use cannot be conclusively defined. However, some trends can be extracted from secondary data sources that generally support the conclusion discussed herein.

Land use data collected for small watershed projects administered by SCS indicates that cropland in the flood plain will be more intensively used given an acceptable level of protection from flood waters. This is also true of the larger water resource projects constructed on the major streams. This was most noticeable during the rapid expansion of soybean acreage during the 1960's and 1970's. For example, cropland on IVw soils increased 105,000 acres from 1977 to 1982. Cropland acreage in the flood plain may continue to be more intensively used, but the acreage is not expected to increase significantly unless there is a corresponding increase in the demand for, and price of farm products. Furthermore, the number of new water resource projects to reduce flooding along major stream systems and in small watersheds has steadily declined during the past ten years. Most of the priority flood problems have been recognized and addressed where an economically defensible solution was apparent.

Future changes in flood plain land use will be more closely regulated, thus moderating the chance of any drastic short-term trend.

#### WATER USE

Alabama's withdrawal water use has increased 30 percent from 6,700 million gallons per day (mgd) in 1970, to 8,700 mgd in 1982. Seventy-six percent of all water withdrawal in 1982 was for thermonuclear power. Industrial and commercial water use accounted for 15 percent, public water systems, 7 percent, and agricultural, self-supplied domestic, and mining used the remaining 2 percent. This ratio of quantity used has not changed in recent years. Ninety-seven percent of total withdrawal was from surface water sources while only 3 percent was from groundwater. This surface- to ground water withdrawal ratio is essentially the same as 1970. Surface water will continue to provide the majority of the State's water use due to the lower cost and the availability in most locations. Alabama's total withdrawal water usage is expected to continue to increase at an annual rate of about 2 percent per year in the future.

Agricultural water use has more than doubled since 1970, increasing from 57 mgd to 129 mgd in 1982. Irrigation increased from 18 mgd to 40 mgd over this period. Livestock usage increased from 27 mgd to 55 mgd, while catfish production has increased from 12 mgd to 34 mgd. Catfish production and irrigation are expected to continue as the agricultural water users with greatest increase

in usage. Water use for catfish production is expected to increase about 10 percent per year and irrigation, 7 percent. Catfish production returns the majority of water withdrawn to the water source, while other agricultural uses consume most withdrawals. Total agricultural water usage is expected to continue increasing about 5 to 7 percent per year.

With an expected increase in total water withdrawal of 2 percent each year, Alabama can expect to use 12,000 mgd by the year 2000. Thus, Alabama's dependable water supply of 67,000 mgd will be more than adequate for the states' overall expected water needs in the foreseeable future. However, there are several areas across the state where surface and ground water availability problems are of concern due to competition for use and increasing demands on the available supply. During low streamflow periods, instream usage versus withdrawal usage of available supplies is a problem on the Cahaba and Black Warrior Rivers in the vicinity of Birmingham. Ground water competition is also becoming a problem in urban areas in Baldwin, Houston, and Mobile Counties. As Alabama's large urban centers continue to expand, the competition for water from both surface and ground water supplies will become a greater problem for all water users in these areas.



## CHAPTER 7

### RELATED NATURAL RESOURCES

#### WETLANDS

More citizens of Alabama are beginning to appreciate wetlands. In the past, most landowners considered their wetlands as unattractive, worthless areas infested with mosquitoes, poisonous snakes, and other pests. A change in attitude toward wetlands has occurred through an "environmental awakening" that has focused attention on the many values of wetlands. Wetlands lessen the effects of heavy floods after large storms by retaining flood water for release later as base flow during dry spells and for recharge of underground aquifers. Water quality is improved as wetlands absorb certain nutrients and cause the deposition of silt and other pollutants. Many species of fish and other aquatic animals depend either directly or indirectly on wetlands during at least part of their lives. In Alabama, numerous species of wildlife, both game and non-game, benefit from, and in some cases require, the habitat offered by wetlands. Many landowners supplement their incomes by charging for hunting of ducks and other waterfowl on wetlands. Certain forest timber types such as cypress and tupelo gum grow best on wetland sites. Wetlands also offer interesting and educational experiences for people because of the variety of plants and animals generally available.

Alabama has almost 3.8 million acres of wetlands as defined by Circular 39, U.S. Department of Interior. The vast majority, 86 percent, of all wetlands in Alabama occur as Type I, Inland Freshwater Areas. The distribution of wetlands by types is displayed in Table 7-1.

#### WILDLIFE

Wildlife is a valuable resource in Alabama from many standpoints. Its aesthetic, recreational and economic values are among the most important.

The aesthetic values are evidenced by the immense satisfaction Alabamians get by seeing and hearing wildlife. At every opportunity, motorists slow down to admire deer, turkey, fox, ducks, geese, and other wildlife along the state's highways. Many people consider a casual walk through woods and other areas where wildlife abound to be as therapeutic as a mini-vacation. The recreational value of wildlife is attested to by the fact that every year, over 300,000 Alabamians buy hunting licenses and enjoy the excellent hunting this state provides. In addition, there are many more who enjoy the recreational value of hunting, but are exempt from buying a license. Hunters less than 16 years old, those 65 or older, and landowners who only hunt on their own lands are examples.

The economic value of wildlife will continue to increase in importance as Alabama's population increases. According to a survey made in 1981-82 by the Alabama Department of Conservation and Natural Resources, almost \$300 million was spent in Alabama by only four groups of hunters -- deer, small game (dove, quail, rabbits, squirrels), turkey, and waterfowl (Table 7-2).

Table 7-1  
ALABAMA WETLANDS BY TYPE BY MLRA

MLRA	INLAND FRESH WETLAND								COASTAL SALINE WETLAND	STATE TOTALS
	1*	2	3	4	6	7	8	TOTAL	18	
	SEASONALLY FLOODED BASINS OR FLATS	INLAND FRESH MEADOWS	INLAND SHALLOW FRESH MARSHES	INLAND DEEP FRESH MARSHES	SHRUB SWAMPS	WOODED SWAMPS	BOGS	INLAND FRESHWATER WETLANDS	REGULARLY FLOODED SALT MARSH	
	1000 ACRES									
122	63.4		1.2					64.6		64.6
128	271.3	18.0	4.2		1.3	8.9		303.7		303.7
129/125	94.8	1.2	2.5			1.3		99.8		99.8
133A/152A	2369.1	27.3	17.6	1.3	18.9	393.5	7.8	2835.5	9.5	2845.0
135	337.3	2.7	1.8					341.8		341.8
136	113.5	1.3	1.3		1.3	11.5		128.9		128.9
TOTALS	3249.4	50.5	28.6	1.3	21.5	415.2	7.8	3774.3	9.5	3783.8

\* USDI CIRCULAR 39 WETLAND TYPES

SOURCE: 1982 NRI

Table 7-2

Values of Four Groups of Hunted Wildlife in Alabama, 1981-82

Species Hunted	Number of Hunters	Hunting Trips	Animals Harvested	Expenditures Per Trip	Total Expenditures
Deer	210,000	2,605,730	202,000	\$68	\$177,189,640
Small Game	378,098	2,413,930	6,622,326	36	86,901,480
Turkey	49,000	326,796	35,000	68	22,222,128
Waterfowl	23,292	145,005	1,165,500	47	6,815,235
Total					\$293,128,483

Source: Alabama Department of Conservation and Natural Resources

Hunting privilege fees and wildlife land leases also add to landowners' income. These are largely incomes with little expense involved. Some farmers provide hunters with lodging and food in addition to hunting privileges. Average charges for hunting privileges are about \$2-3 per acre per year to hunting clubs for large blocks of land. These fees vary widely depending on location, facilities, wildlife available, and services provided.



## FISHERY RESOURCES

Alabama's fishery resources are considered among the best in the nation. Freshwater fisheries are available throughout the state in both perennial streams and reservoirs. According to the U.S. Geological Survey, the total discharge of all streams flowing through Alabama or along its borders averages 93 bgd. This large streamflow volume coupled with the surface storage in large reservoirs located throughout the state offers an abundance of fishery habitat for a variety of species. In addition to the major impoundments, the State Department of Conservation and Natural Resources (Parks and Recreation) oversees the operation and management of numerous state parks and county lakes for use by the general public.

The increasing amount of leisure time, improved fishing equipment, and increased public access to water have contributed to a large increase in demands on the states' fishery resources. In some localities, strict creel limits and size requirements have been established as needed to preserve proper fishery balance.

Retail sales of recreational equipment ranging from boats, bait and tackle to picnic supplies benefit from the abundant water-related recreational sites.

Alabama's coastal waters provide recreational and commercial fishermen excellent opportunity for both pleasure and income. Population expansion in Mobile and Baldwin Counties and the rapid rate of commercial and recreational development along the coast have triggered a large increase in salt water and brackish water fishery activity.

## AQUACULTURE

A relatively small segment of Alabama's rural land is used in commercial aquaculture. This rapidly expanding enterprise consists primarily of channel catfish production concentrated in the west central part of the state. Other species, notably rainbow trout, are being commercially produced in north Alabama.

### Catfish Production

Alabama is one of the three leading states in the production of channel catfish. An aquaculture survey conducted in Alabama in 1983, showed a total of 8,600 acres in catfish production ponds with another 800 acres in fingerling production, and 2,700 acres in fish-out ponds. Almost 7,200 acres of the catfish ponds are clustered in a six-county area consisting of Hale, Dallas, Perry, Greene, Sumter, and Tuscaloosa Counties.

Most of the catfish ponds are located on relatively level Coastal Plain or Blackbelt soils that were formerly in pasture, hayland, or soybeans. This was both an economical and compatible land use change. Annual yields and net returns from its former use were quite low.



The growth of the catfish industry in Alabama has been rapid. Table 7-3 indicates growth since 1965. Processing facilities, fingerling producers, and feed suppliers are now well established. A fish farming technical center has been established at Greensboro, Alabama to provide service statewide. Technical specialists at the center provide early diagnosis of fish health and water quality problems and furnish technical assistance in the planning, design, and construction of production and hatchery facilities. A strong advertising and promotion campaign by a national organization, the Catfish Farmers of America, has increased the demand for catfish in recent years.

Table 7-3

Growth of Catfish Production in Alabama, 1965-1982

<u>Year</u>	<u>Acres in Commercial Production</u>
1965	900
1970	2,100
1975	6,100
1980	8,000
1982	8,600

Source: USDA-SCS, Auburn, AL

Other Fishery Species

Other species of fish are being grown commercially in Alabama. Four rainbow trout operations with a net length of 1,140 feet of raceways are established in three counties of north Alabama. Big head, silver and grass carp, tilapia and fresh water shrimp are now being cultured on an experimental basis in central and southeast Alabama.

The outlook for continued expansion of aquaculture in Alabama is good. Soil and water resources are available to support as many as 70,000 acres in aquaculture production. Fishery resource specialists report they expect 25,000 to 35,000 acres in commercial aquaculture production in Alabama by the year 2000.

## GLOSSARY

Adequately Protected. Soil erosion and other factors that influence sustained productive use of the resource are within acceptable limits.

Aquaculture. Propagation and rearing of aquatic species in a controlled or selected environment.

Basal Area. The area in square feet of the cross section at breast height of a single tree or of all trees in a stand, usually expressed in square feet per acre.

Census Water or Water Area. Surface area of bodies of water greater than 40 acres in size and of perennial streams greater than 1/8 mile wide.

Conservation Practices (systems). Measures or combinations of measures used to meet specific needs in carrying out soil conservation programs.

Conservation Tillage. Any tillage and planting system that maintains at least a 30 percent protective cover of residue on the soil surface after planting to reduce soil erosion. Types of conservation tillage include no-tillage, strip-tillage, and mulch tillage.

Contour Farming. Plowing, planting, and cultivating crops on the contour.

Conventional Tillage. The combined primary and secondary tillage operations normally performed in producing a given crop. Operations may include plowing, chiseling, disking, harrowing, and cultivating the crop.

Cover Crop. A close-growing crop grown primarily for the purpose of protecting and improving soil between periods of regular crop production or between trees and vines in orchards and vineyards.

Critical Area. A land area generally devoid of vegetation that suffers severe erosion to the extent that adjacent lands are being damaged or threatened by excess runoff or deposition. The land does not possess the inherent fertility to reestablish a satisfactory vegetative cover of grass or trees without the application of plant nutrients, site preparation, seeding, and water disposal measures when needed.

Critical Erosion. The amount of soil erosion originating from gullies, road banks, stream banks, and other critical areas.

Crop Residue. The part of a plant or crop left in the field after harvest.

Crop Residue Use. The use of crop residue to protect cultivated fields from erosion from harvest until planting of the next crop.



Desirable Trees. Growing-stock trees that are of commercial species, have no defects in quality for timber products, are of relatively high vigor, and contain no pathogens that may result in death or serious deterioration before rotation age.

Diversion (or diversion terrace). A ridge of earth, generally a terrace, built to protect downslope areas by diverting runoff from its natural course.

Ephemeral Gully Erosion. A form of channel erosion occurring in sloping cropland fields. Generally confined to fields of cultivated crops where there are no conservation water disposal systems. Ephemeral gullies appear to be erased by tillage operations, but the depressions are permanently established in the field.

Evapotranspiration. The combined loss of water from a given area and during a specific period of time by evaporation from the soil surface and by transpiration from plants.

Farmstead. That part of a farm that is occupied by the dwellings, buildings, adjacent yards and family gardens and orchards. Land in farmsteads includes land used for barns, pens, and feedlots next to buildings, farmstead or feedlot windbreaks, and family gardens associated with operating farms.

Federal Land. All land and small areas of water owned and managed by federal agencies, for example, National Forest, National Parks, military reservations, and other public domain lands.

Fish-out Ponds. Those ponds where the harvest and marketing of fish are primarily accomplished by bait and tackle by the consumer who pays a fee, by the pound, for the fish caught.

Flood Plain or Flood Prone Areas. Areas adjoining rivers, streams, water courses, bays, lakes, alluvial plains, or other areas that in the past have been covered intermittently with flood water or that can be expected to be flooded in the future. Areas subject to inundation by a flood having an average recurrence interval of once or more in 100 years, or a 1 percent or greater chance of occurrence in any given year.

Forest Land Forage Protection, Improvement or Reestablishment. A management system that provides protection from overgrazing by livestock management and distribution. This includes the application of minerals, noxious weed control and possibly brush management to improve existing stands. Vegetative cover is reestablished where the desired type of vegetation is missing, brush management is applied if needed, and grazing is permitted only after vegetation is established.

Forest Type. A classification of forest land based upon the species forming a plurality of live-tree stocking.

Fossil Fuel. Coal, petroleum, and natural gas.

Grade Stabilization Structure. A structure that stabilizes the grade of a gully or other watercourse, thereby preventing further head cutting or lowering of the channel grade.



Grassed Waterway. A natural or constructed waterway that is typically broad and shallow and that is seeded to grass and protected against erosion; designed to conduct surface water away from cropland.

Ground Water Mining (Overdraft). Water withdrawn from the ground at a rate greater than the long-term rate of recharge.

Growing-Stock Trees. Live trees that are of commercial species and qualify as desirable or acceptable trees.

Growing-stock Volume. Net volume in cubic feet of growing-stock trees at least 5.0 inches in diameter at breast height, from a 1-foot stump to a minimum 4.0-inch top diameter outside bark of the central stem, or to the point where the central stem breaks into limbs.

Hydrologic Changes. Changes that relate to water standing or flowing on or beneath the surface of the earth.

Hydrologic Subregion. One of seven major drainage basins in the Southeastern United States contributing runoff to Alabama streams.

Irrigation Water Management. The use and management of irrigation water whereby the quantity of water used for each irrigation is determined by the water-holding capacity of the soil and the need of the crop. The rate of application is such that the crop can use it efficiently with no significant erosion.

Land Capability. The quality of soil resources for agricultural use is commonly expressed as land capability classes and subclasses, which show, in a general way, the suitability of soils for most kinds of field crops. Soils are grouped according to their limitations when they are used for field crops, the risk of damage when they are used, and the way they respond to treatment.

Capability Classes. The broadest groups, are designated by Roman numerals I through VIII. The numerals indicate progressively greater limitations and narrower choices for practical use. The classes are defined as follows:

Class I soils have few limitations that restrict their use.

Class II soils have moderate limitations that reduce the choice of plants.

Class III soils have severe limitations that reduce the choice of plants.

Class IV soils have very severe limitations that reduce the choice of plants.

Class V soils are not likely to erode, but have other limitations, impractical to remove, that limit their use.

Class VI soils have severe limitations that make them generally unsuitable for cultivation.

Class VII soils have very severe limitations that make them unsuitable for cultivation.

Class VIII soils and land forms have limitations that nearly preclude their use for commercial crop production.

Capability Subclasses. Soil groups within one class; they are designated by adding a small letter, "e", "w", or "s", to the class numeral, for example, IIe. The letter "e" shows that the main limitation is risk of erosion unless close-growing plant cover is maintained; "w" shows that water in or on the soil interferes with plant growth or cultivation (in some soils the wetness can be partly corrected by artificial drainage); "s" shows that the soil is limited mainly because it is shallow, droughty, or stony.

Land Use. A descriptive term that usually carries a connotation of cover and use. The 1982 NRI accounted land by "land cover/use" and "use of the land", in order to improve the specific nature of the data. For example, forest land (cover/use) was also classified according to whether it was primarily for wood production or other designated use such as recreation, wilderness, etc., (use of the land). The definitions below are for "land cover/use" and "use of the land" categories in the 1982 NRI; for statistical reasons, some categories were combined in the tables but are defined for the reader's information.

Cropland. Land used for crop production in 1982 in the following categories:

Horticulture. Fruit, nuts, vineyards, bush fruit, berries, and other horticulture.

Row and Close Grown. Includes corn, sorghum, soybeans, cotton, peanuts, other row crops, wheat, and other close grown crops.

Other Cropland. Fallow and other cropland that is temporarily idle.

Hayland. Includes grasses, legumes, other hay plants and mixtures harvested by mowing.

Pastureland and Native Pasture. Includes lands having grasses, legumes and/or forbs and less than 10 percent tree cover (coded primarily to the plant cover, not use).

Forest Land. Land at least 10 percent stocked by forest trees of any size, or formerly having had such tree cover and not currently developed for non-forest use. Minimum area is one acre and must be at least 100 feet wide.

Minor Use(s). The residual non-federal rural land after cropland, pastureland, and forest land uses are tabulated. Specifically includes the NRI categories farmsteads, other land in farms (specific), mines, quarries, and pits, small built-up areas, and other rural lands (specific). In this volume, small built-up is excluded from tables with land capability class and subclass.

Other Land in Farms. Farmsteads, ranch headquarters, field windbreaks, feedlots, greenhouses, nurseries, broiler facilities, etc.

Barren Land. Includes bare rock, strip mines, quarries, gravel pits, borrow pits, beaches, dunes and flats, and other barren lands.



Other Land. All lands not otherwise classified (specific explanation was required - very little found that could not be otherwise classified).

Built-up. Land used for residences, industrial, commercial, construction, and institutional sites. Highways and railroads are included if surrounded.

Urban and Built-Up. Units larger than 40 acres and units 10 to 40 acres.

Small Built-Up. Areas from 1/4 acre to 10 acres.

Rural Transportation. All roads and railroads outside of urban and built-up areas including farm lanes, logging roads and other private roads.

Water. Water bodies and perennial streams. Water bodies less than 40 acres categorized as less than 2 acres and 2 to 40 acres. Perennial streams categorized as less than 66 feet wide, 66 to 660 feet wide and greater than 1/8 mile (660 feet) wide. Water bodies larger than 40 acres were categorized as lake, reservoir, bay or gulf, and estuary.

Use of Land. The 1982 NRI categorized land use as follows:

- Crop production -- any crop except wood
- Livestock grazing
- Wood Production
- Idle
- Residential
- Commercial -- including services and cemeteries
- Industrial
- Institutional
- Transmission - power, pipeline, etc., (most underground pipelines would have some other use)
- Waste disposal
- Wilderness (designated)
- Wildlife (designated)
- Recreation (designated)
- Nature Study (designated)
- Research and experimentation
- Military
- Interstate highway
- Paved primary federal and state highways
- Other paved road
- Railroad
- Other roads
- None of the above (includes waters)

Major Land Resource Area (MLRA). A group of geographically associated land resource units. A land resource unit is an area of several thousand acres that is characterized by particular patterns of soil, climate, vegetation, water resources, land use, and type of farming.



Marginal Cropland. Land on which a major crop cannot be grown at a profit considering all production costs and amortized establishment and maintenance cost of a resource management system (conservation practices adequate for resource base protection), but excluding the costs of land and management.

Mortality (Timber or Tree). Sound-wood volume of live trees dying from natural causes during a specified period.

Net Periodic Annual Growth. Average annual net volume increase for the inter-survey period.

Non-census Water or Small Water. Includes water bodies less than 40 acres in surface area and perennial streams less than 1/8 mile wide.

Nonfederal Land. All land area with the following ownerships -- private, municipal, county, state, and Indian tribal (or individual trust).

Pastureland Protection, Improvement or Reestablishment. A management system that provides protection from overgrazing by livestock management and distribution. This includes the application of minerals, noxious weed control and possibly brush management to improve existing stands. Vegetative cover is reestablished where the desired type of vegetation is missing, brush management is applied if needed, and grazing is permitted only after vegetation is established.

Perennial Streams. Streams which flow continuously throughout the year.

Pine Site. Upland sites on which pine is present or was formerly present.

Plow Pan. A subsurface soil layer having higher density and lower porosity than the soil above or below it as a result of pressure applied by tillage operations or other artificial means. Also "tillage pan" or traffic pan".

Poletimber Trees. Growing-stock trees of commercial species at least 5.0 inches in diameter at breast height, but smaller than sawtimber size.

Potential Cropland. Land not now being cropped that has the capability of being converted and managed as cropland on a sustained basis.

Primary Sample Unit (PSU). A sample unit at the first stage of sampling in a multistage sampling plan. In the 1982 NRI, the PSU was a tract of land typically 160 acres in size.

Prime Farmland. Land that has the best combination of physical and chemical characteristics for producing food, feed, forage, fiber, and oilseed crops and is available for these uses. The present land use could be cropland, pastureland, forest land, or other land, but not urban or built-up land or water. Prime farmland soils meet all the following criteria: (1) have adequate and dependable water supply from precipitation or irrigation; (2) have a favorable temperature and growing season; (3) have acceptable acidity or alkalinity; (4) are not saturated with water during the growing season; (5) have low salt and sodium content; (6) are not flooded during the growing season; (7) are not highly erodible; (8) are permeable to air and water; and (9) contain few or no coarse fragments.

Prime Forest Land. Land capable of growing at least 85 cubic feet of solid wood per acre annually.

Prime-Plus Forest Land. Land capable of growing at least 120 cubic feet of solid wood per acre annually.

Raceways. A system especially designed for fish production consisting of a series of long, narrow channels through which there is a continuous flow of water. Raceway systems are widely used for trout production.

Riverine Flood Plain. Land areas subject to flooding along large rivers and streams which have total watershed areas of 250,000 acres or more.

Sawtimber Trees. Live trees that are of commercial species, contain at least a 12-foot saw log, and meet regional specifications for freedom from defect. Softwoods must be at least 9.0-inches in diameter at breast height and hardwoods at least 11.0-inches.

Sawtimber Volume. Net volume of the saw log portion of live sawtimber in board feet, international 1/4-inch rule, and in cubic feet.

Sediment. Soil or rock fragments either being transported by or having been deposited by water.

Sheet and Rill Erosion (average annual). The amount of soil erosion estimated by the use of the Universal Soil Loss Equation stated in terms of tons per acre or in total tons when multiplied by the number of acres involved.

Soil Deterioration. Loss of potential productive capability of a soil that results from destructive processes accelerated by the activities of man, for example, through soil erosion and waterlogging.

Soil Loss Tolerance (T). The maximum level of soil loss that will permit high level production economically and indefinitely. The term "tolerable soil loss" is used also with the same definition. The terms are expressed as average annual tons per acre (t/a/y) of soil erosion).

Stand-size Class. A classification of forest land based on the size class of growing-stock trees on the area; that is, sawtimber, poletimber, or sapling and seedling.

Strip Tillage. Planting and tillage operations that are limited to a strip not to exceed one-third of the distance between rows, leaving the area between the rows untilled with a protective cover of crop residue on the surface for erosion control.

Terrace. (1) An embankment, or ridge, constructed across sloping lands or on the contour. The terrace intercepts surface runoff so that it can soak into the soil or flow slowly to a prepared outlet. A terrace intended mainly for drainage has a deep channel that is maintained in permanent sod. (2) A level, usually narrow plain bordering a river, lake, or sea. Rivers sometimes are bordered by terraces at different levels.



Timber Establishment and Reinforcement. Establishing trees either by planting or by natural or artificial seeding with or without site preparation on sites where stocking is inadequate.

Timber Removals. The net volume of growing-stock trees removed by harvesting, cultural operations such as timber-stand improvement, land clearing, or changes in land use.

Timber Stand/Crop Improvement. The removal of undesirable trees and the restriction of grazing to improve the growth potential of forest land.

Treatment Not Feasible. The land and/or vegetation is not feasible to treat. Feasibility is based on a reasonable return on the investment.

Tributary Flood Plain. Land areas subject to flooding along streams which have total watershed areas less than 250,000 acres.

Universal Soil Loss Equation (USLE). An erosion model designed to compute the longtime average soil losses from sheet and rill erosion under specified conditions. It does not predict deposition, compute sediment yields, or erosion from gullies, streambanks, and streambeds. The soil loss equation is  $A = RKLSCP$ , where A is the computed soil loss per unit area, R is the rainfall factor, K is the soil erodibility factor, L is the slope length factor, S is the slope steepness factor, C is the cover and management factor, and P is the support practice factor.

Watershed. A drainage basin or area which collects and transmits runoff usually by means of streams and tributaries to the outlet of the basin.

Water Disposal and Contouring. A system of engineering practices that intercept and conduct surface runoff at a nonerosive velocity to a stable outlet or collect or intercept excess surface water and carry to an outlet.

Wetlands. Lowlands covered with shallow and sometimes temporary or intermittent waters as defined in Circular 39, "Wetlands of the United States", USDI, Fish and Wildlife Service.

Wet Soils. Soils having problems of seasonal or permanent water tables serious enough to inhibit cultivation.



## APPENDIX A

### INVENTORY DESIGN AND STATISTICAL RELIABILITY

INVENTORY DESIGN  
AND  
STATISTICAL RELIABILITY

1982 NATIONAL RESOURCES INVENTORY (NRI)

Sample Design

The 1982 NRI was designed to obtain natural resource data usable for analysis at a substate (multi-county) level. Estimates based on 1982 NRI data can be developed for such substate entities (multi-county areas) as Major Land Resource Areas (MLRA's), major hydrologic units, regional planning districts, and various USDA agencies' administrative areas. The sample was selected giving particular attention to MLRA's.

Samples for the 1982 NRI were selected using the standard statistical techniques of stratification, area sampling, and clustering. Stratification subdivides the universe of interest into strata that are each more homogeneous than the population as a whole. This increases the accuracy of the survey (reduces the sampling variance), in addition to providing several side benefits.

In Alabama, the strata are 2-mile by 6-mile rectangular-shaped pieces of land. The strata were developed on a county by county basis.

Two-stage area samples were taken within each stratum. The first-stage sampling unit, or primary sampling unit (PSU), was an area of land. At the second-stage of sampling, three sample points were selected within each PSU. They were selected randomly within each PSU using a procedure controlled to assure that the points are spread over the PSU. Approximately 17,000 points were sampled on nonfederal rural land in Alabama. In most parts of the state, the PSU was a square, one-half mile on a side, containing 160 acres.

The number of PSUs selected within a stratum varies from county to county. The particular number depended upon several factors, including: the variability of the county relative to land use and soils patterns, the size of the county, and the sizes of the MLRA's (Major Land Resource Areas) in which the county is located.

The sample consisted of nearly 6,500 PSUs. These samples comprise roughly a 3 percent sample for the nonfederal land area in the state. However, many counties have either a higher or lower (first-stage) sampling rate, depending upon the factors discussed above.

The data files created from the 1982 NRI were developed using three types of data: (1) NRI County Base Data, (2) data collected for each first-stage sampling unit (PSU), and (3) data collected at the selected points within each PSU. The NRI County Base Data were established by SCS in early 1982 via a census-type effort. Acreages were obtained for each county and by each MLRA within a county for the following: total surface area subdivided into water area and land area; federally owned land, by agency; urban and built-up land; and rural land areas in roads or railroads.

Data items collected for each PSU include acreages in: farmsteads, small built-up areas, small streams, small water bodies, windbreaks, and critical eroding areas. These are small or linear features that would be subject to bias if sampled only on a point basis; the data collected at the PSU level are area measurements. Acres of urban and built-up land and of large (census) water were also collected for each PSU.

The collection of data at designated points within each PSU resulted in the most extensive type of data collected for the NRI. Most NRI data elements were collected on a point basis. All land uses were inventoried at this level, so that data for farmsteads, urban and built-up, water, and rural transportation were collected by more than one method.

The three types of data were combined using a ratio estimation procedure. The sample data were statistically expanded to equal the nonfederal land area of a county as determined by the NRI County Base Data; this was done on an MLRA-within-county basis. The point data files constructed by this procedure can be easily manipulated for use in analyzing particular resource conditions.

### Reliability and Limitations

The basic statistical design criterion used to develop the NRI sample can be expressed quantitatively in terms of the coefficients of variation (or accuracy) of the land use acreage estimates. The sample was selected in a way guaranteeing that the coefficient of variation of an estimate is less than 10 percent if the land use comprises at least 10 percent of the land area within the particular MLRA under consideration. The coefficient of variation is the relative standard error of an estimate and is generally more valuable for comparative purposes than is a standard error or sampling variance. The design criterion can also be expressed in terms of confidence intervals: suppose we estimate that 10 percent of a particular MLRA is prime farmland; then a 95 percent confidence interval for this estimate is at worst 8-12 percent. The coefficient of variation is often much less than 10 percent for such an estimate, and the confidence interval is then proportionately narrower.

Although the 1982 NRI was designed for MLRA level analysis, it was too expensive to sample MLRA's of much less than one million acres at a rate sufficient to meet the NRI standards. To increase the reliability of the MLRA data presented for Alabama, most data for two of the smaller MLRA's have been combined with that of similar, adjacent MLRA's. Data for the Cumberland Plateaus and Mountains - MLRA 125 (comprised of 183,400 acres of nonfederal rural land) in extreme Northeast Alabama, has been combined with data for Sand Mountain - MLRA 129. Data for the Gulf Coast Flatwoods - MLRA 152A (comprised of 446,100 acres) along the coastal area of Mobile and Baldwin Counties have been combined with data for the Coastal Plain - MLRA 133A. One additional MLRA in the state, Highland Rim and Pennyroyal - MLRA 122 is comprised of only 501,200 acres in Lauderdale, Limestone and Madison Counties. These data were not combined with another MLRA because they were thought to be representative of resources in the three counties involved.

An example of the inventory reliability for Alabama can be shown by examining the margin of error for the total estimated acreage of each major land use in the state (Table A-1).



Table A-1  
Reliability of Estimates, by Land Use

Land Use	Margin of Error (Percent)
Cropland	4.4
Pastureland	4.8
Forest Land	1.3
Minor Uses	13.6

Even though the 1982 NRI was designed for MLRA level analysis, the data files can be used to compute estimates for individual counties, hydrologic units, and similar small-sized areas. Many estimates at this level may not be reliable enough to recommend their use for making decisions. (See discussion of adjustment of NRI data at the county level in Appendix D.) An example of why data users should be cautious is displayed in Table A-2, where reliability of cropland acreage estimates for four geographic regions is presented.

Table A-2  
Reliability of Cropland Acreage Estimates

Region	Estimated Cropland (1000 Acres)	Margin of Error (Percent)
United States	421,402.5	0.4
Alabama	4,510.3	4.4
MLRA 128	813.0	9.4
Cherokee County	69.9	28.0

The margin of error presented in Table A-2 is approximately twice the estimated coefficient of variation. A 95 percent confidence interval can be obtained by subtracting from and adding to the estimate the margin of error. Because 28 percent of 69,900 acres is about 20,000 acres, then one can be 95 percent confident that the true amount of cropland in Cherokee County, Alabama is between 50,000 and 90,000 acres. Data analysts and decision makers should decide if such an estimate is precise enough for their use.

NRI data users should take into consideration several factors when analyzing NRI figures. It is important to remember that the NRI data are sample data and, therefore, are subject to some degree of uncertainty. Estimates for small universes or rare items have a low degree of precision and should be used with caution.

Another consideration is that the NRI erosion data cannot be used to compute the erosion that actually occurred during 1982. Erosion rates computed from the data are estimated average annual (or expected) rates based upon the cropping practices, management practices, and resource conditions over a four year period. The climatic factors entering the erosion prediction equations (models) are based upon long-term average conditions and not upon one year's actual climatic events.

Further details on data availability and reliability can be obtained from the Soil Conservation Service, P. O. Box 311, Auburn, Alabama, 36830.

### 1982 FOREST SURVEY <sup>1/</sup>

The 1982 Forest Survey is a continuing forest resource inventory and monitoring effort by the U.S. Forest Service at 10-year intervals. The survey was conducted by the Forest Inventory and Analysis Research Work Unit, now located in Starkville, Mississippi. Specific information concerning this survey can be obtained by addressing the Project Leader, Forest Inventory and Analysis Research Work Unit, Forestry Sciences Laboratory, P. O. Box 906, Starkville, Mississippi, 39750.

The forest resource data presented in this report are based on either published or file data for nonfederal forest land in Alabama, collected during the 1982 and previous Forest Surveys, unless otherwise referenced to the 1982 NRI.

#### Sample Design

Data were collected on acreage of commercial forest land by ownership class, forest type, stand size class, site class, physiographic site class, and combinations of these and other characteristics. Detailed data were also collected on growing-stock volumes, total volumes, removals, and many other forest resource characteristics.

The data on forest acreage and timber volume were collected through the use of a systematic sampling method involving a forest-nonforest classification on aerial photographs and on-the-ground measurements of trees at sample locations. The sample locations were at the intersections of a grid of lines spaced 3 miles apart. At this intensity, a plot location represents about 6,000 acres. At each forest location, per-acre estimates were obtained via a variable plot radius cruising method that involves taking measurements at 10 points over an area of approximately one acre. This sampling method was selected to insure that trees of all sizes were sampled at equal intensity.

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<sup>1/</sup> Forest Statistics for Alabama Counties in 1982. USDA-Forest Service Resource Bulletin 50-97, New Orleans, February, 1985.

## Data Reliability

The sampling methods were developed to provide suitable state estimates. Estimates for smaller areas have been developed, but sampling error increases as the area considered decreases. Sampling errors are based on one standard deviation or a probability of two chances out of three. Examples of sampling errors:

Characteristic Sampled	Sampling Error	
	State Level	County Range
	-----Percent-----	
Commercial Forest Land, Acres	0.3	1.1-3.2
Growing-Stock Volume, MBF	1.4	6.5-17.2
	<u>All Species -</u>	<u>By Species -</u>
	<u>State Level</u>	<u>State Level <sup>1/</sup></u>
Timber Volume:		
Growing-Stock -- Softwood	2.2	3.1-23.5
-- Hardwood	1.7	3.5-44.5
Sawtimber -- Softwood	2.4	3.5-29.3
-- Hardwood	2.2	4.6-48.3

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<sup>1/</sup> Sampling error for some species of minor importance in Alabama exceeded 50 percent.

Copies of Forest Statistics for Alabama Counties in 1982 can be obtained from the Starkville, Mississippi address, or from the Alabama Forestry Commission, 513 Madison Avenue, Montgomery, Alabama 36104.



## APPENDIX B

### LAND USE AND OWNERSHIP DATA TABLES

#### Table B-1

-- Surface Area of Nonfederal and Federal Land and Census Water, By County, 1982

#### Table B-2

-- Minor Uses by Land Capability Class and Subclass, 1982

#### Table B-3

-- Ownership of Nonfederal Rural Land by Land Use, 1982

#### Table B-4

-- Prime Farmland, 1982, by Land Use, by MLRA and by Land Capability Class and Subclass

#### Table B-5

-- Pastureland, Forest Land and Minor Uses Having Medium to High Potential for Conversion to Cropland, 1982, by MLRA and by Land Capability Class and Subclass

#### Table B-6

-- Erodible Land Marginal or Not Suitable for Crops, 1982, by Current Land Use, by MLRA, by Land Capability Class and Subclass

Table B-1

## SURFACE AREA OF NONFEDERAL AND FEDERAL LAND AND CENSUS WATER, BY COUNTY, 1982

	NONFEDERAL	FEDERAL	CENSUS WATER	TOTAL
	-----1000 ACRES-----			
AUTAUGA	380.4	1.7	4.2	386.3
BALDWIN	1013.6	3.7	58.2	1075.5
BARBOUR	561.5	4.2	12.9	578.6
BIBB	339.8	60.0	0.1	399.9
BLOUNT	411.6		3.3	414.9
BULLOCK	399.8		1.2	401.0
BUTLER	498.7			498.7
CALHOUN	310.5	80.5	1.1	392.1
CHAMBERS	379.9	3.3	2.9	386.1
CHEROKEE	354.0		30.1	384.1
CHILTON	422.0	22.5	3.6	448.1
CHOCTAW	577.0	5.0	7.4	589.4
CLARKE	786.2	1.1	14.2	801.5
CLAY	320.3	66.8	0.4	387.5
CLEBURNE	279.1	79.8	0.1	359.0
COFFEE	419.1	16.2		435.3
COLBERT	374.4	2.7	22.2	399.3
CONECUH	546.5		0.1	546.6
COOSA	420.6		5.9	426.5
COVINGTON	610.5	53.8	3.9	668.2
CRENSHAW	390.9		0.1	391.0
CULLMAN	472.2		8.9	481.1
DALE	315.4	43.9	0.9	360.2
DALLAS	620.1	3.9	12.2	636.2
DEKALB	498.1		0.4	498.5
ELMORE	397.2	0.6	22.9	420.7
ESCAMBIA	579.5	29.0		608.5
ETOWAH	347.1		5.4	352.5
FAYETTE	402.8		0.2	403.0
FRANKLIN	401.9	1.8	10.3	414.0
GENEVA	369.6	0.2	0.5	370.3
GREENE	398.9	4.8	18.9	422.6
HALE	391.6	30.8	1.3	423.7
HENRY	355.0	1.2	7.3	363.5
HOUSTON	369.0	0.2	2.8	372.0
JACKSON	684.0	0.9	36.5	721.4
JEFFERSON	716.3		3.6	719.9

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Table B-1 (Continued)

SURFACE AREA OF NONFEDERAL AND FEDERAL LAND AND CENSUS WATER, BY COUNTY, 1982

	NONFEDERAL	FEDERAL	CENSUS WATER	TOTAL
	-----1000 ACRES-----			
LAMAR	387.1		0.2	387.3
LAUDERDALE	421.9	1.4	36.8	460.1
LAWRENCE	354.4	89.3	15.6	459.3
LEE	390.0		4.0	394.0
LIMESTONE	343.6	13.9	31.1	388.6
LOWNDES	455.4	1.8	6.5	463.7
MACON	381.8	10.9	0.1	392.8
MADISON	475.4	40.2	4.7	520.3
MARENGO	627.6	1.4	0.6	629.6
MARION	474.7		1.2	475.9
MARSHALL	363.0		35.7	398.7
MOBILE	792.1	0.2	24.4	816.7
MONROE	650.3	1.9	7.1	659.3
MONTGOMERY	504.0	3.3	4.5	511.8
MORGAN	361.5	6.6	15.3	383.4
PERRY	425.9	32.7	1.2	459.8
PICKENS	558.8	4.6	6.4	569.8
PIKE	430.1		0.1	430.2
RANDOLPH	363.3		10.8	374.1
RUSSELL	393.1	12.4	8.3	413.8
ST CLAIR	407.2		10.8	418.0
SHELBY	512.3		6.1	518.4
SUMTER	572.8	7.7	4.2	584.7
TALLADEGA	428.9	52.9	4.6	486.4
TALLAPOOSA	446.8	1.9	41.4	490.1
TUSCALOOSA	843.4	11.8	10.3	865.5
WALKER	514.2		3.0	517.2
WASHINGTON	691.7		5.1	696.8
WILCOX	563.1	2.2	17.5	582.8
WINSTON	303.9	88.7	11.7	404.3
STATE TOTAL	31553.4	904.4	633.3	33091.1

SOURCE: 1982 NRI



Table B-2

MINOR USES BY LAND CAPABILITY  
CLASS AND SUBCLASS. 1982

	FARMSTEADS AND RANCH HEADQUARTERS	OTHER LAND IN FARMS	MINES, QUARRIES, AND PITS	SMALL BUILT-UP AREAS	OTHER RURAL LANDS	TOTAL
	-----1000 ACRES-----					
I	9.6		1.3		4.6	15.5
IIe	71.5	33.7	3.3		8.3	116.8
IIIs	6.5	0.5				7.0
IIW	1.8		11.0		1.3	14.1
IIIe	44.0	14.5	2.5		10.8	71.8
IIIs	7.8	1.0	2.6		6.9	18.3
IIIW	2.9	9.5			2.7	15.1
IVe	20.0	4.5	19.6		7.5	51.6
IVs	1.0		1.2			2.2
IVW	1.2				21.5	22.7
V		5.1	2.7		11.9	19.7
VIe	18.1	3.9	1.1		7.5	30.6
VIIs	0.3		6.3		4.0	10.6
VIW					1.6	1.6
VIIe	9.9	2.5	20.0		12.8	45.2
VIIIs	2.2	2.6	63.0		5.0	72.8
VIIW					29.3	29.3
VIII			10.4		1.2	11.6
N/A				179.9		179.9
TOTAL	196.8	77.8	145.0	179.9	136.9	736.4

SOURCE: 1982 NRI

Table B-3

## OWNERSHIP OF NONFEDERAL RURAL LAND BY LAND USE, 1982

## MLRA 122

LAND USE	PRIVATE			PUBLIC	TOTAL
	CORPORATE	INDIVIDUAL	UNCLASSIFIED		
	-----1000 ACRES-----				
CROPLAND	7.5	204.3		3.4	215.2
PASTURE		99.4			99.4
FOREST	3.2	128.8		1.2	133.2
MINOR USES		3.4	2.5		5.9
TOTAL	10.7	435.9	2.5	4.6	453.7

## MLRA 128

LAND USE	PRIVATE			PUBLIC	TOTAL
	CORPORATE	INDIVIDUAL	UNCLASSIFIED		
	-----1000 ACRES-----				
CROPLAND	33.5	774.5		5.0	813.0
PASTURE	9.9	521.1		5.1	536.1
FOREST	166.7	1773.4		22.7	1962.8
MINOR USES	2.4	63.1	13.2	3.5	82.2
TOTAL	212.5	3132.1	13.2	36.3	3394.1

## MLRA 129/125

LAND USE	PRIVATE			PUBLIC	TOTAL
	CORPORATE	INDIVIDUAL	UNCLASSIFIED		
	-----1000 ACRES-----				
CROPLAND	8.0	495.3		0.9	504.2
PASTURE	16.6	607.7			624.3
FOREST	614.8	2240.2		48.7	2903.7
MINOR USES	46.2	90.9	12.8		149.9
TOTAL	685.6	3434.1	12.8	49.6	4182.1

Table B-3 (Continued)

## OWNERSHIP OF NONFEDERAL RURAL LAND, BY LAND USE, 1982

## MLRA 133A/152A

LAND USE	CORPORATE	PRIVATE INDIVIDUAL	UNCLASSIFIED		PUBLIC	TOTAL
	-----1000 ACRES-----					
CROPLAND	71.1	2328.8		:	7.6	2407.5
PASTURE	32.0	1578.4		:	15.8	1626.2
FOREST	3588.2	8734.1		:	169.2	12491.5
MINOR USES	48.5	180.2	31.3	:	18.0	278.0
TOTAL	3739.8	12821.5	31.3	:	210.6	16803.2

## MLRA 135

LAND USE	CORPORATE	PRIVATE INDIVIDUAL	UNCLASSIFIED		PUBLIC	TOTAL
	-----1000 ACRES-----					
CROPLAND	17.90	456.80		:	6.50	481.20
PASTURE	34.00	617.70		:	4.40	656.10
FOREST	166.60	696.00		:	9.60	872.20
MINOR USES	1.30	5.50	3.60	:	7.8	18.20
TOTAL	219.80	1776.00	3.60	:	28.30	2027.70

## MLRA 136

LAND USE	CORPORATE	PRIVATE INDIVIDUAL	UNCLASSIFIED		PUBLIC	TOTAL
	-----1000 ACRES-----					
CROPLAND	2.30	86.90		:		89.20
PASTURE	2.30	271.10		:	1.10	274.50
FOREST	353.70	1901.10		:	15.10	2269.90
MINOR USES	3.60	11.70	7.00	:		22.30
TOTAL	361.90	2270.80	7.00	:	16.20	2655.90

SOURCE: 1982 NRI



Table B-4

PRIME FARMLAND, 1982, BY LAND USE,  
BY MLRA AND BY LAND CAPABILITY CLASS AND SUBCLASS

## MLRA 122

## NON-FEDERAL RURAL LAND

CLASS/ SUBCLASS	CROPLAND	PASTURELAND	FOREST LAND	MINOR USES	TOTAL
	-----1000 ACRES-----				
I	2.4				2.4
IIe	120.8	35.3	15.1	3.5	174.7
IIs	1.2				1.2
IIw	31.2	13.7	9.9		54.8
IIIe	7.4	1.6	1.1		10.1
IIIw	9.1		3.5		12.6
TOTAL	172.1	50.6	29.6	3.5	255.8

## MLRA 128

CLASS/ SUBCLASS	CROPLAND	PASTURELAND	FOREST LAND	MINOR USES	TOTAL
	-----1000 ACRES-----				
I	28.9	2.5	2.5	1.1	35.0
IIe	314.4	138.5	105.2	15.1	573.2
IIs		2.7			2.7
IIw	146.0	59.3	82.8		288.1
IIIe	53.7	10.3	9.2	4.2	77.4
IIIw	24.8	16.6	28.1		69.5
TOTAL	567.8	229.9	227.8	20.4	1045.9

Table B-4 (Continued)

PRIME FARMLAND, 1982, BY LAND USE,  
BY MLRA AND BY LAND CAPABILITY CLASS AND SUBCLASS

MLRA 129/125

NON-FEDERAL RURAL LAND

CLASS/ SUBCLASS	CROPLAND	PASTURELAND	FOREST LAND	MINOR USES	TOTAL
-----1000 ACRES-----					
I	4.0			0.2	4.2
IIe	259.3	192.6	125.1	18.8	595.8
IIw	11.2	40.7	44.5		96.4
IIIe	2.4	8.5	8.6	9.6	29.1
IIIw	6.5	5.7	17.2		29.4
TOTAL	283.4	247.5	195.4	28.6	754.9

MLRA 133A/152A

CLASS/ SUBCLASS	CROPLAND	PASTURELAND	FOREST LAND	MINOR USES	TOTAL
-----1000 ACRES-----					
I	285.3	45.2	143.9	14.2	488.6
IIe	769.8	326.9	824.2	40.6	1961.5
IIs	23.6	4.8	8.5	5.1	42.0
IIw	194.0	91.5	399.8	1.5	686.8
IIIe	255.9	168.4	459.0	8.3	891.6
IIIw	13.6		14.1	1.4	29.1
IVe		1.2			1.2
TOTAL	1542.2	638.0	1849.5	71.1	4100.8

Table B-4 (Continued)

PRIME FARMLAND, 1982, BY LAND USE,  
BY MLRA AND BY LAND CAPABILITY CLASS AND SUBCLASS

## MLRA 135

## NON-FEDERAL RURAL LAND

CLASS/ SUBCLASS	CROPLAND	PASTURELAND	FOREST LAND	MINOR USES	TOTAL
	-----1000 ACRES-----				
I	2.6	1.3			3.9
IIe	90.9	54.7	58.2	1.6	205.4
IIw	79.8	100.8	74.9		255.5
IIIe	99.0	104.2	109.4	5.9	318.5
IIIw	22.6	11.9	44.6		79.1
TOTAL	294.9	272.9	287.1	7.5	862.4

## MLRA 136

CLASS/ SUBCLASS	CROPLAND	PASTURELAND	FOREST LAND	MINOR USES	TOTAL
	-----1000 ACRES-----				
I	4.4	4.4	7.5		16.3
IIe	18.7	34.4	112.6	1.3	167.0
IIw	6.3	16.9	30.1		53.3
IIIe		1.3	3.6	1.9	6.8
IIIw		1.2	6.4		7.6
TOTAL	29.4	58.2	160.2	3.2	251.0

-----  
SOURCE: 1982 NRI



Table B-5

PASTURELAND, FOREST LAND AND MINOR USES HAVING MEDIUM  
TO HIGH POTENTIAL FOR CONVERSION TO CROPLAND, 1982, BY MLRA AND  
BY LAND CAPABILITY CLASS AND SUBCLASS

MLRA 122

NON-FEDERAL RURAL LAND

CLASS/ SUBCLASS	PASTURELAND		FOREST LAND		MINOR USES		TOTALS	
	MEDIUM	HIGH	MEDIUM	HIGH	MEDIUM	HIGH	MEDIUM	HIGH
-----1000 ACRES-----								
Ile	13.5	19.5	5.6	6.3			19.1	25.8
Iiw	7.9	5.0	1.4	4.6			9.3	9.6
IIle	11.1	2.9	16.0	3.8			27.1	6.7
IIiw		1.2	2.3	1.2			2.3	2.4
IVe		1.2						1.2
IVw	1.1	1.2	12.4	2.3			13.5	3.5
TOTAL	33.6	31.0	37.7	18.2			71.3	49.2

MLRA 128

CLASS/ SUBCLASS	PASTURELAND		FOREST LAND		MINOR USES		TOTALS	
	MEDIUM	HIGH	MEDIUM	HIGH	MEDIUM	HIGH	MEDIUM	HIGH
-----1000 ACRES-----								
I		1.3		1.2				2.5
Ile	73.7	66.6	46.4	19.7		3.5	120.1	89.8
IIs		2.7						2.7
Iiw	31.0	30.6	28.3	17.2			59.3	47.8
IIle	67.8	17.6	87.8	11.7	2.4		158.0	29.3
IIIs			3.0				3.0	
IIiw	17.1	14.3	20.9	9.0			38.0	23.3
IVe	31.5	3.7	27.5	2.3	3.5		62.5	6.0
IVs	2.7		5.0	2.5			7.7	2.5
IVw	17.5	2.2	21.7	1.5			39.2	3.7
[VIe] 1/	3.5		10.6		1.2		15.3	
TOTAL	244.8	139.0	251.2	65.1	7.1	3.5	503.1	207.6

1/ LAND IN THIS CATEGORY IS NORMALLY UNSUITED FOR INTENSIVE CROPPING BECAUSE  
OF SOIL RELATED PROBLEMS SUCH AS EROSION, WETNESS, OR FLOODING

Table B-5 (Continued)

PASTURELAND, FOREST LAND AND MINOR USES HAVING MEDIUM  
TO HIGH POTENTIAL FOR CONVERSION TO CROPLAND, 1982, BY MLRA  
AND BY LAND CAPABILITY CLASS AND SUBCLASS

MLRA 129/125

NON-FEDERAL RURAL LAND

CLASS/ SUBCLASS	PASTURELAND		FOREST LAND		MINOR USES		TOTALS	
	MEDIUM	HIGH	MEDIUM	HIGH	MEDIUM	HIGH	MEDIUM	HIGH
-----1000 ACRES-----								
Ile	101.4	85.0	74.9	21.1		0.9	176.3	107.0
IIw	27.8	6.6	19.4	5.1			47.2	11.7
IIIe	104.2	62.3	96.9	11.5	1.0		202.1	73.8
IIIw	6.4	3.6	16.5		2.5		25.4	3.6
IVe	32.8	7.7	54.9	5.2	2.9		90.6	12.9
IVw	6.8	1.1	2.8	2.3			9.6	3.4
[VIe, VIIs] 1/	3.9		17.5				21.4	
TOTAL	283.3	166.3	282.9	45.2	6.4	0.9	572.6	212.4

MLRA 133A/152A

CLASS/ SUBCLASS	PASTURELAND		FOREST LAND		MINOR USES		TOTALS	
	MEDIUM	HIGH	MEDIUM	HIGH	MEDIUM	HIGH	MEDIUM	HIGH
-----1000 ACRES-----								
I	9.8	24.4	31.6	50.9		0.8	41.4	76.1
Ile	144.8	143.1	220.7	117.3	6.1	8.3	371.6	268.7
IIIs	14.1	2.6	27.8	7.5	0.8		42.7	10.1
IIw	49.7	23.1	152.5	44.3	1.3		203.5	67.4
IIIe	143.7	53.7	237.4	47.2	2.5		383.6	100.9
IIIs	49.9	24.9	183.2	16.0	5.5	1.5	238.6	42.4
IIIw	7.6	2.5	17.7	4.6			25.3	7.1
IVe	85.1	15.1	151.9	18.9	1.8	1.1	238.8	35.1
IVIs	34.7	5.1	76.5	3.9			111.2	9.0
IVw	25.1	21.5	51.4	3.4	3.2		79.7	24.9
[Vw, VIe, VIIs & VIw] 1/	59.5		142.6		3.2		205.3	
TOTAL	624.0	316.0	1293.3	314.0	24.4	11.7	1941.7	641.7

1/ LAND IN THESE CATEGORIES ARE NORMALLY UNSUITED FOR INTENSIVE CROPPING BECAUSE  
OF SOIL RELATED PROBLEMS SUCH AS EROSION, WETNESS, OR FLOODING

Table B-5 (Continued)

PASTURELAND, FOREST LAND AND MINOR USES HAVING MEDIUM  
TO HIGH POTENTIAL FOR CONVERSION TO CROPLAND, 1982, BY MLRA  
AND BY LAND CAPABILITY CLASS AND SUBCLASS

MLRA 135		NON-FEDERAL RURAL LAND						
CLASS/ SUBCLASS	PASTURELAND		FOREST LAND		MINOR USES		TOTALS	
	MEDIUM	HIGH	MEDIUM	HIGH	MEDIUM	HIGH	MEDIUM	HIGH
-----1000 ACRES-----								
I	1.3						1.3	
IIe	18.5	24.4	24.6	10.3			43.1	34.7
IIIs					0.4		0.4	
IIw	29.6	58.5	24.5	10.9			54.1	69.4
IIIe	57.7	40.2	32.7	11.8			90.4	52.0
IIIs					1.3		1.3	
IIIw	10.1	6.7	38.3	6.9			48.4	13.6
IVe	20.4	3.9					20.4	3.9
IVw	32.5	1.3	18.1	1.2			50.6	2.5
[Vw,Vle] 1/	17.3	0.9	16.6				33.9	0.9
TOTAL	187.4	135.9	154.8	41.1	1.7	0.0	343.9	177.0

## MLRA 136

CLASS/ SUBCLASS	PASTURELAND		FOREST LAND		MINOR USES		TOTALS	
	MEDIUM	HIGH	MEDIUM	HIGH	MEDIUM	HIGH	MEDIUM	HIGH
-----1000 ACRES-----								
I	3.2			1.2			3.2	1.2
IIe	20.1	7.2	38.9	10.1			59.0	17.3
IIw	6.3	11.6	10.2				16.5	11.6
IIIe	32.0	2.5	81.3	1.2	1.4		114.7	3.7
IIIs	1.3		1.2				2.5	
IIIw	3.7	1.1	16.3				20.0	1.1
IVe	32.4	2.5	76.7				109.1	2.5
IVs			1.1				1.1	
IVw		1.4	6.6	2.6			6.6	4.0
[Vw,Vle, VIs & VIw] 1/	5.2		35.1				40.3	
TOTAL	104.2	26.3	267.4	15.1	1.4		373.0	41.4

1/ LAND IN THESE CATEGORIES ARE NORMALLY UNSUITED FOR INTENSIVE CROPPING BECAUSE  
OF SOIL RELATED PROBLEMS SUCH AS EROSION, WETNESS, OR FLOODING

SOURCE: 1982 NRI



Table B-6

ERODIBLE LAND MARGINAL OR NOT SUITABLE FOR CROPS, 1982,  
BY CURRENT LAND USE, BY MLRA,  
BY LAND CAPABILITY CLASS AND SUBCLASS

MLRA 122		CURRENT LAND USE <u>1/</u>			
CLASS/ SUBCLASS	CROPS	PASTURE	FOREST	FARMSTEADS AND OTHER LAND	TOTAL
				IN FARMS	
			1000 ACRES		
IIIe	6.9	1.6	6.1		14.6
IVe	3.4	3.5			6.9
VIe	3.7	4.5	5.7		13.9
VIIe		1.2	8.1		9.3
VIIIs	3.1	12.6	31.8	1.0	48.5
TOTAL	17.1	23.4	51.7	1.0	93.2

MLRA 128		CURRENT LAND USE <u>1/</u>			
CLASS/ SUBCLASS	CROPS	PASTURE	FOREST	FARMSTEADS AND OTHER LAND	TOTAL
				IN FARMS	
			1000 ACRES		
IIIe	44.0	45.0	89.6	5.2	183.8
IVe	37.2	56.2	151.3	4.1	248.8
IVs	3.0	7.8	57.8		68.6
VIe	3.9	21.8	172.4	1.2	199.3
VIIs		2.5	38.0		40.5
VIIe	2.5	18.4	336.8	1.2	358.9
VIIIs	1.2	14.0	558.7	3.8	577.7
VIIIIs			2.5		2.5
TOTAL	91.8	165.7	1407.1	15.5	1680.1

1/ NON-FEDERAL RURAL LAND

Table B-6 (Continued)

ERODIBLE LAND MARGINAL OR NOT SUITABLE FOR CROPS, 1982,  
BY CURRENT LAND USE, BY MLRA,  
BY LAND CAPABILITY CLASS AND SUBCLASS

MLRA 129/125		CURRENT LAND USE 1/			
CLASS/ SUBCLASS	CROPS	PASTURE	FARMSTEADS AND OTHER LAND		TOTAL
			FOREST	IN FARMS	
-----1000 ACRES-----					
IIIe	146.3	191.9	304.1	23.3	665.6
IVe	41.7	68.4	251.4	8.4	369.9
IVs			3.8		3.8
VIe	3.6	26.9	210.8	2.5	243.8
VIs		4.3	30.4		34.7
VIIe	4.4	33.9	1360.3	7.0	1405.6
VIIIs	4.9	31.3	469.7		505.9
VIIIIs			5.7		5.7
TOTAL	200.9	356.7	2636.2	41.2	3235.0

MLRA 133A/152A					
CLASS/ SUBCLASS	CROPS	PASTURE	FARMSTEADS AND OTHER LAND		TOTAL
			FOREST	IN FARMS	
-----1000 ACRES-----					
IIIe	20.9	43.9	107.3	5.0	177.1
IVe	74.4	201.2	1203.3	3.4	1482.3
IVs			1.1		1.1
VIe	48.9	105.7	1008.7	3.6	1166.9
VIs	35.1	40.1	496.0	0.3	571.5
VIIe	22.4	75.3	2653.4	2.5	2753.6
VIIIs	6.0	28.5	862.4		896.9
VIIIIs			5.3		5.3
-----					
TOTAL	207.7	494.7	6337.5	14.8	7054.7

1/ NON-FEDERAL RURAL LAND

Table B-6 (Continued)

ERODIBLE LAND MARGINAL OR NOT SUITABLE FOR CROPS, 1982,  
BY CURRENT LAND USE, BY MLRA,  
BY LAND CAPABILITY CLASS AND SUBCLASS

MLRA 135		CURRENT LAND USE <u>1/</u>			
CLASS/ SUBCLASS	CROPS	PASTURE	FARMSTEADS AND OTHER LAND		TOTAL
			FOREST	IN FARMS	
			1000 ACRES		
IIIe	97.0	111.3	94.9		303.2
IVe	63.6	98.0	88.9		250.5
VIe	22.8	112.3	183.6		318.7
VIIs			0.9		0.9
VIIe		3.8	47.0		50.8
VIIIs	1.2	1.2	9.4		11.8
TOTAL	184.6	326.6	424.7		935.9

MLRA 136		FARMSTEADS AND OTHER LAND			
CLASS/ SUBCLASS	CROPS	PASTURE	FOREST		TOTAL
			IN FARMS		
			1000 ACRES		
IIIe			5.6	1.4	7.0
IVe	17.3	81.6	533.8	1.4	636.1
VIe	3.6	19.8	433.4		456.8
VIIs			12.2		12.2
VIIe	3.7	18.4	474.5		496.6
VIIIs		6.0	209.0		215.0
TOTAL	24.6	125.8	1670.5	2.8	1823.7

1/ NON-FEDERAL RURAL LAND

SOURCE: 1982 NRI





## APPENDIX C

### EROSION AND CONSERVATION TREATMENT NEEDS

#### Table C-1

- Sheet and Rill Erosion on Cropland in Relation to "T" Value by MLRA by Land Capability Class and Subclass, 1982

#### Table C-2

- Sheet and Rill Erosion on Row and Double Cropped Land in Relation to "T" Value by MLRA by Land Capability Class and Subclass, 1982

#### Table C-3

- Sheet and Rill Erosion on Pastureland in Relation to "T" Value by MLRA by Land Capability Class and Subclass, 1982

#### Table C-4

- Sheet and Rill Erosion on Forest Land in Relation to "T" Value by MLRA by Land Capability Class and Subclass, 1982

#### Table C-5

- Conservation Treatment Needs on Cropland, 1982, by MLRA by Land Capability Class and Subclass

#### Table C-6

- Conservation Treatment Needs on Pastureland, 1982, by MLRA by Land Capability Class and Subclass

#### Table C-7

- Conservation Treatment Needs on Forest Land, 1982, by MLRA by Land Capability Class and Subclass

#### Table C-8

- Conservation Treatment Needs on Minor Uses, 1982, by MLRA by Land Capability Class and Subclass

#### Table C-9

- Erosion and Sediment by Hydrologic Subregion, 1982





Table C-1

SHEET AND RILL EROSION ON CROPLAND IN RELATION TO T VALUE BY MLRA.  
BY LAND CAPABILITY CLASS AND SUBCLASS, 1982

MLRA 122	<= T		>T AND <=2T		>2T		TOTAL		
CLASS/ SUBCLASS	1,000 TONS	1,000 ACRES	TONS/AC	1,000 TONS	1,000 ACRES	TONS/AC	1,000 TONS	1,000 ACRES	TONS/AC
I				8.4	1.2	7.00	17.9	1.2	14.92
							26.3	2.4	10.96
Ile	28.8	11.3	2.55	181.1	27.1	6.68	1115.5	82.4	13.54
Ils	3.2	1.2	2.67				3.2	1.2	2.67
Ilw	54.3	16.2	3.35	80.7	13.1	6.16	51.7	5.1	10.14
Illc	12.7	8.6	1.48				421.3	17.6	23.94
							434.0	26.2	16.56
IIIw	0.5	1.1	0.45	22.5	5.8	3.88	25.2	2.2	11.45
IVe	0.6	2.3	0.26				25.0	1.1	22.73
IVw	11.8	3.5	3.37	31.9	7.4	4.31			
							43.7	10.9	4.01
VIe	4.2	2.3	1.83				16.1	1.4	11.50
							20.3	3.7	5.49
VIIc	0.6	1.5	0.40				36.2	1.6	22.63
							36.8	3.1	11.87
TOTAL	116.7	48.0	2.43	324.6	54.6	5.95	1708.9	112.6	15.18
							2150.2	215.2	9.99

Table C-1 (Continued)

SHEET AND RILL EROSION ON CROPLAND IN RELATION TO T VALUE BY MLRA.  
BY LAND CAPABILITY CLASS AND SUBCLASS. 1982

MLRA 128	<= T			>T AND <=2T			>2T			TOTAL		
CLASS/ SUBCLASS	1,000 TONS	1,000 ACRES	TONS/AC	1,000 TONS	1,000 ACRES	TONS/AC	1,000 TONS	1,000 ACRES	TONS/AC	1,000 TONS	1,000 ACRES	TONS/AC
I	60.2	18.8	3.20	65.9	10.1	6.52				126.1	28.9	4.36
IIf	202.2	84.4	2.40	729.4	102.6	7.11	1944.3	128.7	15.11	2875.9	315.7	9.11
IIw	274.5	106.2	2.58	248.0	40.8	6.08	138.7	13.1	10.59	661.2	160.1	4.13
IIIe	55.9	31.9	1.75	270.5	39.0	6.94	1180.3	67.7	17.43	1506.7	138.6	10.87
IIIs	3.0	1.3	2.31							3.0	1.3	2.31
IIIf	25.2	10.5	2.40	82.2	15.9	5.17	133.9	14.7	9.11	241.3	41.1	5.87
IVe	7.4	6.8	1.09	19.5	3.4	5.74	465.9	27.0	17.26	492.8	37.2	13.25
IVs							60.2	3.0	20.07	60.2	3.0	20.07
IVw	142.8	56.3	2.54	107.2	19.8	5.41	23.9	3.4	7.03	273.9	79.5	3.45
VIe							110.6	3.9	28.36	110.6	3.9	28.36
VIIe	3.0	1.3	2.31	11.4	1.2	9.50				14.4	2.5	5.76
VIIIs				6.7	1.2	5.58				6.7	1.2	5.58
TOTAL	774.2	317.5	2.44	1540.8	234.0	6.58	4057.8	261.5	15.52	6372.8	813.0	7.84

Table C-1 (Continued)

SHEET AND RILL EROSION ON CROPLAND IN RELATION TO T VALUE BY MLRA  
BY LAND CAPABILITY CLASS AND SUBCLASS, 1982

MLRA 129/125	<= T			>T AND <=2T			>2T			TOTAL		
CLASS/ SUBCLASS	1,000 TONS	1,000 ACRES	TONS/AC	1,000 TONS	1,000 ACRES	TONS/AC	1,000 TONS	1,000 ACRES	TONS/AC	1,000 TONS	1,000 ACRES	TONS/AC
I	5.8	4.0	1.45							5.8	4.0	1.45
Ile	91.7	71.0	1.29	351.0	74.8	4.69	1262.4	115.3	10.95	1705.1	261.1	6.53
IIw	15.6	8.8	1.77	15.1	2.7	5.59	17.8	1.3	13.69	48.5	12.8	3.79
IIIe	28.1	21.0	1.34	37.5	10.3	3.64	1575.9	116.9	13.48	1641.5	148.2	11.08
IIIw	7.6	3.8	2.00	36.3	6.9	5.26	10.7	0.9	11.89	54.6	11.6	4.71
Ive	13.7	14.7	0.93	37.0	8.8	4.20	336.9	18.2	18.51	387.6	41.7	9.29
IVw	8.4	4.8	1.75	38.9	7.1	5.48				47.3	11.9	3.97
Vle				4.9	1.4	3.50	54.1	2.2	24.59	59.0	3.6	16.39
Vlle				1.7	1.1	1.55	76.1	3.3	23.06	77.8	4.4	17.68
Vlls				0.9	0.8	1.13	76.3	4.1	18.61	77.2	4.9	15.76
TOTAL	170.9	128.1	1.33	523.3	113.9	4.59	3410.2	262.2	13.01	4104.4	504.2	8.14



Table C-1 (Continued)

SHEET AND RILL EROSION ON CROPLAND IN RELATION TO T VALUE BY MLRA  
BY LAND CAPABILITY CLASS AND SUBCLASS. 1982

MLRA 133A/152A	<= T			>T AND <=2T			>2T			TOTAL		
CLASS/ SUBCLASS	1,000 TONS	1,000 ACRES	TONS/AC	1,000 TONS	1,000 ACRES	TONS/AC	1,000 TONS	1,000 ACRES	TONS/AC	1,000 TONS	1,000 ACRES	TONS/AC
I	585.4	200.1	2.93	531.4	77.5	6.86	104.1	7.7	13.52	1220.9	285.3	4.28
Ile	914.3	355.5	2.57	1992.8	292.9	6.80	1868.6	140.7	13.28	4775.7	789.1	6.05
Ils	174.8	72.8	2.40	89.0	12.2	7.30	26.0	1.8	14.44	289.8	86.8	3.34
IIw	280.7	135.3	2.07	454.7	79.5	5.72	140.1	16.2	8.65	875.5	231.0	3.79
IIle	191.9	95.8	2.00	692.1	100.1	6.91	2281.8	143.2	15.93	3165.8	339.1	9.34
IIIs	340.6	161.1	2.11	540.4	74.4	7.26	224.2	16.3	13.75	1105.2	251.8	4.39
IIIw	62.7	23.7	2.65	84.2	16.2	5.20				146.9	39.9	3.68
IVe	33.7	19.9	1.69	93.2	16.4	5.68	760.5	39.9	19.06	887.4	76.2	11.65
IVs	66.4	29.7	2.24	254.8	32.7	7.79	318.2	23.2	13.72	639.4	85.6	7.47
IVw	85.2	38.8	2.20	118.0	22.3	5.29	69.6	7.5	9.28	272.8	68.6	3.98
Vw	69.8	35.5	1.97	37.0	6.2	5.97				106.8	41.7	2.56
VIe	17.6	12.2	1.44	25.1	4.4	5.70	921.3	32.3	28.52	964.0	48.9	19.71
VIIs	42.7	19.7	2.17	67.7	9.3	7.28	130.1	6.1	21.33	240.5	35.1	6.85
VIIe	25.3	8.8	2.88				562.1	13.6	41.33	587.4	22.4	26.22
VIIIs	2.2	0.5	4.40	18.4	3.0	6.13	109.3	2.5	43.72	129.9	6.0	21.65
TOTAL	2893.3	1209.4	2.39	4998.8	747.1	6.69	7515.9	451.0	16.66	15408.0	2407.5	6.40

Table C-1 (Continued)

SHEET AND RILL EROSION ON CROPLAND IN RELATION TO T VALUE BY MLRA  
BY LAND CAPABILITY CLASS AND SUBCLASS. 1982

MLRA 135	<= T			>T AND <=2T			>2T			TOTAL		
CLASS/ SUBCLASS	1,000 TONS	1,000 ACRES	TONS/AC	1,000 TONS	1,000 ACRES	TONS/AC	1,000 TONS	1,000 ACRES	TONS/AC	1,000 TONS	1,000 ACRES	TONS/AC
I	4.7	1.3	3.62	6.4	1.3	4.92				11.1	2.6	4.27
Ile	29.7	13.9	2.14	228.7	36.8	6.21	600.5	50.5	11.89	858.9	101.2	8.49
IIf	153.3	52.8	2.90	214.1	32.0	6.69	9.4	0.9	10.44	376.8	85.7	4.40
IIIe	82.6	35.2	2.35	116.1	19.6	5.92	1025.6	59.4	17.27	1224.3	114.2	10.72
IIIs	2.2	4.3	0.51							2.2	4.3	0.51
IIIf	59.1	22.5	2.63	90.4	17.4	5.20				149.5	39.9	3.75
IVe	19.1	17.0	1.12	44.2	6.7	6.60	739.8	39.9	18.54	803.1	63.6	12.63
IVf	108.4	36.5	2.97	40.6	7.2	5.64				149.0	43.7	3.41
Vf	3.1	1.1	2.82	6.5	0.9	7.22				9.6	2.0	4.80
VIe	5.0	11.7	0.43	11.6	5.2	2.23	95.0	5.9	16.10	111.6	22.8	4.89
VIIs	2.3	1.2	1.92							2.3	1.2	1.92
TOTAL	469.5	197.5	2.38	758.6	127.1	5.97	2470.3	156.6	15.77	3698.4	481.2	7.69

Table C-1 (Continued)

SHEET AND RILL EROSION ON CROPLAND IN RELATION TO T VALUE BY MLRA  
BY LAND CAPABILITY CLASS AND SUBCLASS, 1982

MLRA 136	<= T			>T AND <=2T			>2T			TOTAL		
CLASS/ SUBCLASS	1,000 TONS	1,000 ACRES	TONS/AC	1,000 TONS	1,000 ACRES	TONS/AC	1,000 TONS	1,000 ACRES	TONS/AC	1,000 TONS	1,000 ACRES	TONS/AC
I	7.2	2.4	3.00	10.3	2.0	5.15				17.5	4.4	3.98
Ile	28.5	16.2	1.76				33.2	2.5	13.28	61.7	18.7	3.30
Illw	13.6	6.4	2.13	22.1	3.7	5.97				35.7	10.1	3.53
IIle	7.6	7.4	1.03	55.4	8.7	6.37	77.3	4.8	16.10	140.3	20.9	6.71
IIIs	4.6	2.3	2.00							4.6	2.3	2.00
IIlw	10.7	5.0	2.14							10.7	5.0	2.14
Ive	13.8	8.7	1.59	14.9	3.5	4.26	55.1	5.1	10.80	83.8	17.3	4.84
Ivw				12.9	1.9	6.79				12.9	1.9	6.79
Vw	0.1	1.3	0.08							0.1	1.3	0.08
VIe				6.0	1.2	5.00	34.6	2.4	14.42	40.6	3.6	11.28
Vlle	1.0	1.3	0.77				40.4	2.4	16.83	41.4	3.7	11.19
TOTAL	87.1	51.0	1.71	121.6	21.0	5.79	240.6	17.2	13.99	449.3	89.2	5.04

SOURCE: 1982 NRI



Table C-2

SHEET AND RILL EROSION ON ROW AND DOUBLE CROPPED LAND IN RELATION TO T VALUE  
BY MLRA. BY LAND CAPABILITY CLASS AND SUBCLASS. 1982

MLRA 122

CLASS/ SUBCLASS	<= T		>T AND <=2T		>2T		TOTAL					
	1,000 TONS	1,000 ACRES	TONS/AC	1,000 TONS	1,000 ACRES	TONS/AC	1,000 TONS	1,000 ACRES	TONS/AC			
I				8.4	1.2	7.00	17.9	1.2	14.92	2.4	10.96	
Ile	15.0	4.3	3.49	153.8	22.8	6.75	1037.6	77.6	13.37	1206.4	11.52	
IIs	3.2	1.2	2.67							3.2	1.2	2.67
IIW	50.4	15.0	3.36	80.7	13.1	6.16	51.7	5.1	10.14	182.8	33.2	5.51
IIle	10.0	3.9	2.56				421.3	17.6	23.94	431.3	21.5	20.06
IIIW				22.5	5.8	3.88	25.2	2.2	11.45	47.7	8.0	5.96
IVe							25.0	1.1	22.73	25.0	1.1	22.73
IVW	11.8	3.5	3.37	31.9	7.4	4.31				43.7	10.9	4.01
VIe							16.1	1.4	11.50	16.1	1.4	11.50
VIIIs							36.2	1.6	22.63	36.2	1.6	22.63
TOTAL	90.4	27.9	3.24	297.3	50.3	5.91	1631.0	107.8	15.13	2018.7	186.0	10.85

Table C-2 (Continued)

SHEET AND RILL EROSION ON ROW AND DOUBLE CROPPED LAND IN RELATION TO T VALUE  
BY MLRA. BY LAND CAPABILITY CLASS AND SUBCLASS. 1982

MLRA 128

CLASS/ SUBCLASS	<= T			>T AND <=2T			>2T			TOTAL		
	1,000 TONS	1,000 ACRES	TONS/AC	1,000 TONS	1,000 ACRES	TONS/AC	1,000 TONS	1,000 ACRES	TONS/AC	1,000 TONS	1,000 ACRES	TONS/AC
I	48.4	15.8	3.06	58.3	8.6	6.78				106.7	24.4	4.37
Ile	187.7	60.2	3.12	729.4	102.6	7.11	1888.8	124.7	15.15	2805.9	287.5	9.76
IIw	261.5	90.7	2.88	248.0	40.8	6.08	138.7	13.1	10.59	648.2	144.6	4.48
IIIe	35.7	12.8	2.79	270.5	39.0	6.94	1180.3	67.7	17.43	1486.5	119.5	12.44
IIIs	3.0	1.3	2.31							3.0	1.3	2.31
IIIw	23.3	9.2	2.53	82.2	15.9	5.17	133.9	14.7	9.11	239.4	39.8	6.02
IVe	0.4	0.9	0.44	16.0	2.6	6.15	458.1	25.7	17.82	474.5	29.2	16.25
IVs							17.0	1.7	10.00	17.0	1.7	10.00
IVw	123.7	44.4	2.79	107.2	19.8	5.41	23.9	3.4	7.03	254.8	67.6	3.77
IVe							61.3	2.6	23.58	61.3	2.6	23.58
VIIIs				6.7	1.2	5.58				6.7	1.2	5.58
TOTAL	683.7	235.3	2.91	1518.3	230.5	6.59	3902.0	253.6	15.39	6104.0	719.4	8.48

Table C-2 (Continued)

SHEET AND RILL EROSION ON ROW AND DOUBLE CROPPED LAND IN RELATION TO T VALUE  
BY MLRA. BY LAND CAPABILITY CLASS AND SUBCLASS. 1982

MLRA 129/125

CLASS/ SUBCLASS	<= T			>T AND <=2T			>2T			TOTAL		
	1,000 TONS	1,000 ACRES	TONS/AC	1,000 TONS	1,000 ACRES	TONS/AC	1,000 TONS	1,000 ACRES	TONS/AC	1,000 TONS	1,000 ACRES	TONS/AC
I	1.3	1.6	0.81							1.3	1.6	0.81
Ile	73.0	35.2	2.07	315.4	66.4	4.75	1225.2	110.7	11.07	1613.6	212.3	7.60
IIf	15.6	8.8	1.77	15.1	2.7	5.59	17.8	1.3	13.69	48.5	12.8	3.79
IIIe	15.9	6.8	2.34	19.9	4.9	4.06	1525.4	110.1	13.85	1561.2	121.8	12.82
IIIf	7.6	3.8	2.00	36.3	6.9	5.26	10.7	0.9	11.89	54.6	11.6	4.71
IVe				25.1	5.9	4.25	323.1	16.3	19.82	348.2	22.2	15.68
IVf	8.4	4.8	1.75	38.9	7.1	5.48				47.3	11.9	3.97
VIe				4.9	1.4	3.50	54.1	2.2	24.59	59.0	3.6	16.39
VIf							50.8	1.6	31.75	50.8	1.6	31.75
TOTAL	121.8	61.0	2.00	455.6	95.3	4.78	3207.1	243.1	13.19	3784.5	399.4	9.48



Table C-2 (Continued)

SHEET AND RILL EROSION ON ROW AND DOUBLE CROPPED LAND IN RELATION TO T VALUE  
BY MLRA. BY LAND CAPABILITY CLASS AND SUBCLASS. 1982

MLRA 133A/152A

CLASS/ SUBCLASS	<= T			>T AND <=2T			>2T			TOTAL		
	1,000 TONS	1,000 ACRES	TONS/AC	1,000 TONS	1,000 ACRES	TONS/AC	1,000 TONS	1,000 ACRES	TONS/AC	1,000 TONS	1,000 ACRES	TONS/AC
I	548.2	176.4	3.11	521.2	76.2	6.84	83.4	6.2	13.45	1152.8	258.8	4.45
IIe	768.5	229.7	3.35	1899.4	279.6	6.79	1732.2	129.5	13.38	4400.1	638.8	6.89
IIs	136.9	47.3	2.89	80.8	11.3	7.15	26.0	1.8	14.44	243.7	60.4	4.03
IIw	253.9	97.6	2.60	441.7	77.0	5.74	120.8	13.5	8.95	816.4	188.1	4.34
IIIe	137.3	41.6	3.30	608.8	86.7	7.02	2064.2	127.8	16.15	2810.3	256.1	10.97
IIIs	262.7	91.0	2.89	492.6	66.7	7.39	179.9	12.2	14.75	935.2	169.9	5.50
IIIW	62.0	22.7	2.73	72.9	14.3	5.10				134.9	37.0	3.65
IVe	10.5	4.1	2.56	69.8	11.4	6.12	632.5	31.0	20.40	712.8	46.5	15.33
IVs	47.2	17.8	2.65	174.3	23.6	7.39	245.7	18.4	13.35	467.2	59.8	7.81
IVw	75.9	28.8	2.64	118.0	22.3	5.29	69.6	7.5	9.28	263.5	58.6	4.50
Vw	60.4	18.3	3.30	21.0	3.8	5.53				81.4	22.1	3.68
VIe				23.9	4.0	5.98	572.3	24.1	23.75	596.2	28.1	21.22
VIs	25.8	6.9	3.74	43.5	6.3	6.90	111.6	5.1	21.88	180.9	18.3	9.89
VIIe							537.5	10.8	49.77	537.5	10.8	49.77
VIIIs	2.2	0.5	4.40	14.7	2.5	5.88	109.3	2.5	43.72	126.2	5.5	22.95
TOTAL	2391.5	782.7	3.06	4582.6	685.7	6.68	6485.0	390.4	16.61	13459.1	1858.8	7.24

Table C-2 (Continued)

SHEET AND RILL EROSION ON ROW AND DOUBLE CROPPED LAND IN RELATION TO T VALUE  
BY MLRA. BY LAND CAPABILITY CLASS AND SUBCLASS. 1982

MLRA 135

CLASS/ SUBCLASS	<= T			>T AND <=2T			>2T			TOTAL		
	1,000 TONS	1,000 ACRES	TONS/AC	1,000 TONS	1,000 ACRES	TONS/AC	1,000 TONS	1,000 ACRES	TONS/AC	1,000 TONS	1,000 ACRES	TONS/AC
I	4.7	1.3	3.62	6.4	1.3	4.92				11.1	2.6	4.27
Ile	28.7	8.7	3.30	228.7	36.8	6.21	561.1	45.8	12.25	818.5	91.3	8.96
IIm	149.9	44.6	3.36	207.5	30.7	6.76	9.4	0.9	10.44	366.8	76.2	4.81
IIIe	53.9	19.1	2.82	104.4	17.0	6.14	1012.5	58.1	17.43	1170.8	94.2	12.43
IIIm	49.6	16.9	2.93	90.4	17.4	5.20				140.0	34.3	4.08
IVe	5.9	2.6	2.27	44.2	6.7	6.60	739.8	39.9	18.54	789.9	49.2	16.05
IVm	104.9	32.4	3.24	40.6	7.2	5.64				145.5	39.6	3.67
Vm	3.1	1.1	2.82	6.5	0.9	7.22				9.6	2.0	4.80
VIe				5.8	1.3	4.46	66.2	4.6	14.39	72.0	5.9	12.70
TOTAL	400.7	126.7	3.16	734.5	119.3	6.16	2389.0	149.3	16.00	3524.2	395.3	8.92

Table C-2 (Continued)

SHEET AND RILL EROSION ON ROW AND DOUBLE CROPPED LAND IN RELATION TO T VALUE  
BY MLRA. BY LAND CAPABILITY CLASS AND SUBCLASS. 1982

MLRA 136

CLASS/ SUBCLASS	<= T			>T AND <=2T			>2T			TOTAL		
	1,000 TONS	1,000 ACRES	TONS/AC	1,000 TONS	1,000 ACRES	TONS/AC	1,000 TONS	1,000 ACRES	TONS/AC	1,000 TONS	1,000 ACRES	TONS/AC
I	7.2	2.4	3.00	10.3	2.0	5.15				17.5	4.4	3.98
Ile	23.4	7.1	3.30				21.4	1.4	15.29	44.8	8.5	5.27
IIw	12.8	5.1	2.51	22.1	3.7	5.97				34.9	8.8	3.97
IIIe	1.9	1.2	1.58	47.2	7.4	6.38	55.3	2.5	22.12	104.4	11.1	9.41
IIIs	4.5	1.1	4.09							4.5	1.1	4.09
IIlw	10.5	3.1	3.39							10.5	3.1	3.39
IVe				4.1	1.1	3.73	55.1	5.1	10.80	59.2	6.2	9.55
IVw				12.9	1.9	6.79				12.9	1.9	6.79
VIe							34.6	2.4	14.42	34.6	2.4	14.42
VIIe							40.4	2.4	16.83	40.4	2.4	16.83
TOTAL	60.3	20.0	3.02	96.6	16.1	6.00	206.8	13.8	14.99	363.7	49.9	7.29

SOURCE: 1982 NRI



Table C-3

SHEET AND RILL EROSION ON PASTURELAND IN RELATION TO T VALUE  
BY MLRA. BY LAND CAPABILITY CLASS AND SUBCLASS. 1982

MLRA 122

CLASS/ SUBCLASS	<= T			>T AND <=2T			>2T			TOTAL		
	1,000 TONS	1,000 ACRES	TONS/AC	1,000 TONS	1,000 ACRES	TONS/AC	1,000 TONS	1,000 ACRES	TONS/AC	1,000 TONS	1,000 ACRES	TONS/AC
Ile	21.2	35.3	0.60							21.2	35.3	0.60
IIw	1.7	15.2	0.11							1.7	15.2	0.11
IIIe	13.3	20.7	0.64							13.3	20.7	0.64
IIIw			1.2									1.2
IVe	2.2	3.5	0.63							2.2	3.5	0.63
IVw	0.7	5.2	0.13							0.7	5.2	0.13
VIe	2.6	4.5	0.58							2.6	4.5	0.58
VIIe	2.3	1.2	1.92							2.3	1.2	1.92
VIIIs	19.8	12.6	1.57							19.8	12.6	1.57
TOTAL	63.8	99.4	0.64							63.8	99.4	0.64

Table C-3 (Continued)

ANNUAL SHEET AND RILL EROSION ON PASTURELAND IN RELATION TO T VALUE  
BY MLRA. BY LAND CAPABILITY CLASS AND SUBCLASS. 1982

MLRA 128

CLASS/ SUBCLASS	<= T			>T AND <=2T			>2T			TOTAL		
	1,000 TONS	1,000 ACRES	TONS/AC	1,000 TONS	1,000 ACRES	TONS/AC	1,000 TONS	1,000 ACRES	TONS/AC	1,000 TONS	1,000 ACRES	TONS/AC
I	0.2	2.5	0.08							0.2	2.5	0.08
Ile	52.7	145.9	0.36	3.2	1.3	2.46				55.9	147.2	0.38
IIs	0.5	2.7	0.19							0.5	2.7	0.19
IIn	12.8	74.1	0.17							12.8	74.1	0.17
IIf	44.1	111.7	0.39							44.1	111.7	0.39
IIIn	6.9	42.1	0.16							6.9	42.1	0.16
IIf	43.2	56.0	0.77				3.0	1.5	2.00	46.2	57.5	0.80
IVs	4.0	7.8	0.51							4.0	7.8	0.51
IVn	3.0	33.8	0.09							3.0	33.8	0.09
VIe	16.9	20.5	0.82				14.9	1.3	11.46	31.8	21.8	1.46
VIs	0.9	2.5	0.36							0.9	2.5	0.36
VIf	9.8	18.4	0.53							9.8	18.4	0.53
VIfs	19.4	12.7	1.53				25.6	1.3	19.69	45.0	14.0	3.21
TOTAL	214.2	530.7	0.40	3.2	1.3	2.46	43.5	4.1	10.61	260.9	536.1	0.49

Table C-3 (Continued)

SHEET AND RILL EROSION ON PASTURELAND IN RELATION TO T VALUE  
BY MLRA. BY LAND CAPABILITY CLASS AND SUBCLASS. 1982

MLRA 129/125

CLASS/ SUBCLASS	<= T			>T AND <=2T			>2T			TOTAL	
	1,000 TONS	1,000 ACRES	TONS/AC	1,000 TONS	1,000 ACRES	TONS/AC	1,000 TONS	1,000 ACRES	TONS/AC	1,000 TONS	1,000 ACRES
IIf	57.5	193.6	0.30							57.5	193.6
IIw	9.4	43.0	0.22							9.4	43.0
IIIe	85.1	188.1	0.45	18.4	3.8	4.84	103.5	191.9	0.54	103.5	191.9
IIIw	1.6	15.8	0.10				1.6	15.8	0.10	1.6	15.8
IVe	51.2	62.8	0.82	20.4	5.6	3.64	71.6	68.4	1.05	71.6	68.4
IVw	3.2	15.2	0.21				3.2	15.2	0.21	3.2	15.2
VIe	19.5	24.4	0.80				27.9	2.5	11.16	47.4	26.9
VIs	2.7	4.3	0.63				2.7			2.7	4.3
VIIe	15.3	20.6	0.74	17.6	5.9	2.98	46.0	7.4	6.22	78.9	33.9
VIIIs	15.8	25.0	0.63	3.9	2.4	1.63	29.8	3.9	7.64	49.5	31.3
TOTAL	261.3	592.8	0.44	60.3	17.7	3.41	103.7	13.8	7.51	425.3	624.3



Table C-3 (Continued)

SHEET AND RILL EROSION ON PASTURELAND IN RELATION TO T VALUE  
BY MLRA. BY LAND CAPABILITY CLASS AND SUBCLASS. 1982

MLRA 133A/152A

CLASS/ SUBCLASS	<= T			>T AND (<=2T			>2T			TOTAL		
	1,000 TONS	1,000 ACRES	TONS/AC	1,000 TONS	1,000 ACRES	TONS/AC	1,000 TONS	1,000 ACRES	TONS/AC	1,000 TONS	1,000 ACRES	TONS/AC
I	8.8	45.2	0.19							8.8	45.2	0.19
Ile	90.6	338.4	0.27							90.6	338.4	0.27
IIs	10.2	22.8	0.45							10.2	22.8	0.45
IIm	25.2	126.5	0.20							25.2	126.5	0.20
IIle	141.5	274.2	0.52	9.1	2.9	3.14				150.6	277.1	0.54
IIIs	25.6	101.3	0.25							25.6	101.3	0.25
IIIm	1.2	11.3	0.11							1.2	11.3	0.11
Ive	117.8	186.6	0.63	72.1	14.4	5.01	45.9	2.8	16.39	235.8	203.8	1.16
IVs	41.9	77.5	0.54							41.9	77.5	0.54
IVm	16.4	82.1	0.20							16.4	82.1	0.20
Vm	18.4	87.6	0.21							18.4	87.6	0.21
VIe	73.3	90.6	0.81	69.6	11.7	5.95	27.4	3.4	8.06	170.3	105.7	1.61
VIS	21.3	40.1	0.53							21.3	40.1	0.53
VIIe	53.4	58.4	0.91	36.1	8.7	4.15	119.3	8.2	14.55	208.8	75.3	2.77
VIIIs	25.4	27.3	0.93	5.8	1.2	4.83				31.2	28.5	1.09
VIIIm	0.3	3.0	0.10							0.3	3.0	0.10
TOTAL	671.3	1572.9	0.43	192.7	38.9	4.95	192.6	14.4	13.38	1056.6	1626.2	0.65

Table C-3 (Continued)

SHEET AND RILL EROSION ON PASTURELAND IN RELATION TO T VALUE  
BY MLRA. BY LAND CAPABILITY CLASS AND SUBCLASS. 1982

MLRA 135

CLASS/ SUBCLASS	<= T			>T AND <=2T			>2T			TOTAL		
	1,000 TONS	1,000 ACRES	TONS/AC	1,000 TONS	1,000 ACRES	TONS/AC	1,000 TONS	1,000 ACRES	TONS/AC	1,000 TONS	1,000 ACRES	TONS/AC
I	0.1	1.3	0.08							0.1	1.3	0.08
Ile	28.9	64.4	0.45							28.9	64.4	0.45
IIw	23.2	115.3	0.20							23.2	115.3	0.20
IIIe	75.6	126.5	0.60	14.8	3.9	3.79				90.4	130.4	0.69
IIIw	7.6	19.8	0.38							7.6	19.8	0.38
IVe	80.3	74.4	1.08	86.6	23.6	3.67				166.9	98.0	1.70
IVw	23.2	81.7	0.28							23.2	81.7	0.28
Vw	7.7	27.9	0.28							7.7	27.9	0.28
VIe	72.7	64.7	1.12	56.2	14.8	3.80	226.8	32.8	6.91	355.7	112.3	3.17
VIIe	0.6	1.3	0.46	20.2	2.5	8.08				20.8	3.8	5.47
VIIIs	0.9	1.2	0.75							0.9	1.2	0.75
TOTAL	320.8	578.5	0.55	177.8	44.8	3.97	226.8	32.8	6.91	725.4	656.1	1.11

Table C-3 (Continued)

SHEET AND RILL EROSION ON PASTURELAND IN RELATION TO T VALUE  
BY MLRA. BY LAND CAPABILITY CLASS AND SUBCLASS. 1982

MLRA 136

CLASS/ SUBCLASS	1,000 TONS	<= T		1,000 TONS	TONS/AC	1,000 TONS	>T AND <=2T		1,000 TONS	TONS/AC	1,000 TONS	>2T		1,000 TONS	TONS/AC	1,000 TONS	TOTAL		1,000 ACRES	TONS/AC
I	0.1	4.4	0.02											0.1	4.4	0.02				
Ile	13.1	35.6	0.37											13.1	35.6	0.37				
Ilw	3.9	20.6	0.19											3.9	20.6	0.19				
IIle	40.4	70.6	0.57											40.4	70.6	0.57				
IIIs	0.1	1.3	0.08											0.1	1.3	0.08				
IIIlw	1.0	9.6	0.10											1.0	9.6	0.10				
IVe	44.5	80.5	0.55	2.6	1.1	2.36								47.1	81.6	0.58				
IVlw	0.1	2.7	0.04											0.1	2.7	0.04				
Vw	0.2	3.9	0.05											0.2	3.9	0.05				
VIe	11.4	18.5	0.62								14.7	1.3	11.31	26.1	19.8	1.32				
VIIe	13.8	17.2	0.80								7.8	1.2	6.50	21.6	18.4	1.17				
VIIIs	4.5	6.0	0.75											4.5	6.0	0.75				
TOTAL	133.1	270.9	0.49	2.6	1.1	2.36					22.5	2.5	9.00	158.2	274.5	0.58				

SOURCE: 1982 NRI



Table C-4

SHEET AND RILL EROSION ON FOREST LAND IN RELATION TO T VALUE BY MLRA.  
BY LAND CAPABILITY CLASS AND SUBCLASS, 1982

MLRA 122

CLASS/ SUBCLASS	<= T			>T AND <=2T			>2T			TOTAL		
	1,000 TONS	1,000 ACRES	TONS/AC	1,000 TONS	1,000 ACRES	TONS/AC	1,000 TONS	1,000 ACRES	TONS/AC	1,000 TONS	1,000 ACRES	TONS/AC
Ile	0.7	15.1	0.05							0.7	15.1	0.05
IIw	0.4	9.9	0.04							0.4	9.9	0.04
IIIe	4.6	32.0	0.14							4.6	32.0	0.14
IIIw	0.0	8.2	0.00								8.2	
IVw	0.6	21.2	0.03							0.6	21.2	0.03
IVe	4.6	5.7	0.81							4.6	5.7	0.81
VIle	5.5	7.0	0.79	6.5	1.1	5.91				12.0	8.1	1.48
VIIe	5.9	31.8	0.19				2.7	1.2	2.25	8.6	33.0	0.26
TOTAL	22.3	130.9	0.17	6.5	1.1	5.91	2.7	1.2	2.25	31.5	133.2	0.24

Table C-4 (Continued)

SHEET AND RILL EROSION ON FOREST LAND IN RELATION TO T VALUE BY MLRA.  
BY LAND CAPABILITY CLASS AND SUBCLASS, 1982

MLRA 128

CLASS/ SUBCLASS	<= T			>T AND <=2T			>2T			TOTAL		
	1,000 TONS	1,000 ACRES	TONS/AC	1,000 TONS	1,000 ACRES	TONS/AC	1,000 TONS	1,000 ACRES	TONS/AC	1,000 TONS	1,000 ACRES	TONS/AC
I		2.5									2.5	
Ile	11.0	114.9	0.10	6.5	1.0	6.50				17.5	115.9	0.15
IIm	3.8	100.9	0.04							3.8	100.9	0.04
IIle	24.5	230.8	0.11							24.5	230.8	0.11
IIIs		4.1									4.1	
IIIm	1.8	64.6	0.03							1.8	64.6	0.03
IVe	28.2	151.3	0.19							28.2	151.3	0.19
IVs	9.6	59.9	0.16							9.6	59.9	0.16
IVm	5.0	117.3	0.04							5.0	117.3	0.04
VIe	45.7	171.3	0.27	4.6	1.1	4.18				50.3	172.4	0.29
VIIs	4.6	38.0	0.12							4.6	38.0	0.12
VIIe	113.0	324.5	0.35	26.0	11.7	2.22	30.5	3.9	7.82	169.5	340.1	0.50
VIIIs	180.4	550.2	0.33	13.6	11.0	1.24	3.1	1.3	2.38	197.1	562.5	0.35
VIIIs	0.1	2.5	0.04							0.1	2.5	0.04
TOTAL	427.7	1932.8	0.22	50.7	24.8	2.04	33.6	5.2	6.46	512.0	1962.8	0.26

Table C-4 (Continued)

SHEET AND RILL EROSION ON FOREST LAND IN RELATION TO T VALUE BY MLRA.  
BY LAND CAPABILITY CLASS AND SUBCLASS, 1982

MLRA 129/125

CLASS/ SUBCLASS	<= T		>T AND <=2T		>2T		TOTAL	
	1,000 TONS	1,000 ACRES	TONS/AC	1,000 TONS	1,000 ACRES	TONS/AC	1,000 TONS	1,000 ACRES
Ile	16.4	125.8	0.13				16.4	125.8
IIf	5.4	57.7	0.09				5.4	57.7
IIle	29.4	310.2	0.09	8.7	3.8	2.29	38.1	314.0
IIIf		1.1						1.1
IIIf	0.8	30.2	0.03				0.8	30.2
IVe	47.7	249.0	0.19				115.6	251.4
IVf	0.7	3.8	0.18				0.7	3.8
IVf	2.3	30.1	0.08	67.9	2.4	28.29	2.3	30.1
Vf	0.0	6.1	0.00					6.1
Vle	49.0	204.4	0.24	3.8	2.5	1.52	25.1	210.8
VIf	1.5	28.8	0.05	2.3	1.6	1.44	3.8	30.4
VIIe	557.5	1303.1	0.43	53.9	23.1	2.33	1001.6	1364.9
VIIIf	113.1	442.3	0.26	41.4	15.9	2.60	542.4	471.7
VIIIf	1.2	5.7	0.21				1.2	5.7
TOTAL	825.0	2798.3	0.29	110.1	46.9	2.35	2417.6	2903.7
								0.83



Table C-4 (Continued)

SHEET AND RILL EROSION ON FOREST LAND IN RELATION TO T VALUE BY MLRA  
BY LAND CAPABILITY CLASS AND SUBCLASS. 1982

MLRA 133A/152A

CLASS/ SUBCLASS	<= T			>T AND <=2T			>2T			TOTAL		
	1,000 TONS	1,000 ACRES	TONS/AC	1,000 TONS	1,000 ACRES	TONS/AC	1,000 TONS	1,000 ACRES	TONS/AC	1,000 TONS	1,000 ACRES	TONS/AC
I	18.4	143.9	0.08							18.4	143.9	0.13
Ile	104.5	844.6	0.12				10.6	1.6	6.63	115.1	846.2	0.14
IIs	5.4	88.7	0.06							5.4	88.7	0.06
IIn	37.6	668.2	0.06							37.6	668.2	0.06
IIle	136.1	863.2	0.16				40.1	4.3	9.33	176.2	867.5	0.20
IIIs	63.5	472.8	0.13	3.7	0.5	7.40				67.2	473.3	0.14
IIIn	7.6	124.5	0.06							7.6	124.5	0.06
IVe	287.2	1180.5	0.24	75.3	15.4	4.89	261.1	17.3	15.09	623.6	1213.2	0.51
IVs	102.4	465.2	0.22	95.0	15.8	6.01				197.4	481.0	0.41
IVn	62.8	655.0	0.10							62.8	655.0	0.10
Vn	77.4	1677.6	0.05							77.4	1677.6	0.05
VIe	308.8	985.7	0.31	49.5	9.3	5.32	306.2	19.7	15.54	664.5	1014.7	0.65
VIIs	147.5	477.3	0.31	74.4	9.0	8.27	222.3	9.7	22.92	444.2	496.0	0.90
VIn	1.6	65.8	0.02							1.6	65.8	0.02
VIIe	1091.3	2525.4	0.43	176.6	39.0	4.53	2479.8	95.2	26.05	3747.7	2659.6	1.41
VIIIs	357.0	825.0	0.43	96.4	20.1	4.80	495.9	21.2	23.39	949.3	866.3	1.10
VIIIn	3.8	144.7	0.03							3.8	144.7	0.03
VIIIIs	5.7	5.3	1.08							5.7	5.3	1.08
TOTAL	2818.6	12213.4	0.23	570.9	109.1	5.23	3816.0	169.0	22.58	7205.5	12491.5	0.58

Table C-4 (Continued)

SHEET AND RILL EROSION ON FOREST LAND IN RELATION TO T VALUE BY MLRA.  
BY LAND CAPABILITY CLASS AND SUBCLASS, 1982

MLRA 135

CLASS/ SUBCLASS	<= T		>T AND <=2T		>2T		TOTAL	
	1,000 TONS	1,000 ACRES	TONS/AC	1,000 TONS	1,000 ACRES	TONS/AC	1,000 TONS	1,000 ACRES
Ile	19.9	61.6	0.32	27.4	0.9	30.44	47.3	62.5
IIw	6.7	95.5	0.07				6.7	95.5
IIIe	11.6	118.5	0.10				11.6	118.5
IIIs		3.1						3.1
IIIw	7.0	71.8	0.10				7.0	71.8
IVe	32.7	88.9	0.37				32.7	88.9
IVs	5.4	3.1	1.74				5.4	3.1
IVw	30.6	139.8	0.22				30.6	139.8
Vw	1.8	45.0	0.04				1.8	45.0
VIe	87.8	166.1	0.53	4.4	0.9	4.89	391.4	183.6
VI s	0.0	0.9	0.00					0.9
VIw	1.1	3.1	0.35				1.1	3.1
VIIe	12.9	41.4	0.31	17.1	1.9	9.00	68.2	47.0
VII s	0.2	9.4	0.02				0.2	9.4
TOTAL	217.7	848.2	0.26	21.5	2.8	7.68	487.0	872.2
							726.2	0.83

Table C-4 (Continued)

SHEET AND RILL EROSION ON FOREST LAND IN RELATION TO T VALUE, BY MLRA  
BY LAND CAPABILITY CLASS AND SUBCLASS, 1982

MLRA 136

CLASS/ SUBCLASS	<= T			>T AND <=2T			>2T			TOTAL		
	1,000 TONS	1,000 ACRES	TONS/AC	1,000 TONS	1,000 ACRES	TONS/AC	1,000 TONS	1,000 ACRES	TONS/AC	1,000 TONS	1,000 ACRES	TONS/AC
I	0.3	7.5	0.08							0.3	7.5	0.04
Ile	9.1	115.1	0.08	10.2	1.2	8.50				19.3	116.3	0.17
IIm	1.6	33.9	0.05							1.6	33.9	0.05
IIle	46.3	282.9	0.16	9.1	2.3	3.96				55.4	285.2	0.19
IIIs	0.1	2.4	0.04							0.1	2.4	0.04
IIIm	4.0	75.3	0.05							4.0	75.3	0.05
Ive	116.1	526.9	0.22	14.8	2.5	5.92	124.8	6.4	19.50	255.7	535.8	0.48
IVs	0.2	1.1	0.18							0.2	1.1	0.18
IVm	0.5	21.8	0.02							0.5	21.8	0.02
Vm	1.0	49.0	0.02							1.0	49.0	0.02
VIe	105.7	420.7	0.25	22.2	4.8	4.63	159.0	11.6	13.71	286.9	437.1	0.66
VIIs	0.6	12.2	0.05							0.6	12.2	0.05
VIm		4.9									4.9	
VIIe	145.5	449.8	0.32	28.4	15.7	1.81	161.1	9.0	17.90	335.0	474.5	0.71
VIIIs	57.1	202.0	0.28	4.9	1.3	3.77	94.9	9.6	9.89	156.9	212.9	0.74
TOTAL	488.1	2205.5	0.22	89.6	27.8	3.22	539.8	36.6	14.75	1117.5	2269.9	0.49

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SOURCE: 1982 NRI



Table C-5

CONSERVATION TREATMENT NEEDS ON CROPLAND, 1982,  
BY LAND CAPABILITY CLASS AND SUBCLASS

CLASS/ SUBCLASS	TREATMENT NEEDED			TOTAL NEEDING TREATMENT	TOTAL
	ADEQUATELY PROTECTED	EROSION CONTROL	DRAINAGE		
	-----1000 ACRES-----				
I	185.1	130.8	11.7 *	142.5	327.6
IIe	441.4	1165.2		1165.2	1606.6
IIs	70.2	17.8		17.8	88.0
IIw	220.9	236.5	76.7	313.2	534.1
IIIe	157.3	629.9		629.9	787.2
IIIs	145.2	114.5		114.5	259.7
IIIW	48.4	92.0	6.2	98.2	146.6
IVe	59.7	179.7		179.7	239.4
IVs	25.9	62.7		62.7	88.6
IVw	89.8	74.2	52.5	126.7	216.5
Vw	29.3	4.6	11.1	15.7	45.0
VIe	18.7	67.8		67.8	86.5
VIs	17.2	17.9		17.9	35.1
VIIe	11.4	21.6		21.6	33.0
VIIIs	2.8	13.6		13.6	16.4
STATE TOTAL	1523.3	2828.8	158.2	2987.0	4510.3

\* CLASS I SOILS ARE NORMALLY CONSIDERED WELL DRAINED: HOWEVER,  
BECAUSE OF TOPOGRAPHY, WETNESS PROBLEMS MAY EXIST IN SMALL AREAS

SOURCE: 1982 NRI

Table C-5 (Continued)

CONSERVATION TREATMENT NEEDS ON CROPLAND, 1982,  
BY MLRA

MLRA	TREATMENT NEEDED			TOTAL NEEDING TREATMENT	TOTAL
	ADEQUATELY PROTECTED	EROSION CONTROL	DRAINAGE		
	-----1000 ACRES-----				
122	35.5	168.0	11.7	179.7	215.2
128	236.5	531.7	44.8	576.5	813.0
129/125	107.3	394.4	2.5	396.9	504.2
133A/152A	992.7	1353.8	61.0	1414.8	2407.5
135	116.7	330.1	34.4	364.5	481.2
136	34.6	50.8	3.8	54.6	89.2
STATE TOTAL	1523.3	2828.8	158.2	2987.0	4510.3

-----  
SOURCE: 1982 NRI

Table C-5 (Continued)

CONSERVATION TREATMENT NEEDS ON CROPLAND, 1982,  
BY MLRA BY LAND CAPABILITY CLASS AND SUBCLASS

MLRA 122	TREATMENT NEEDED				TOTAL
	ADEQUATELY PROTECTED	EROSION CONTROL	DRAINAGE	TOTAL NEEDING TREATMENT	
CLASS/ SUBCLASS	-----1000 ACRES-----				
I		2.4		2.4	2.4
IIe	9.7	111.1		111.1	120.8
IIIs		1.2		1.2	1.2
IIw	11.2	18.8	4.4	23.2	34.4
IIIe	7.4	18.8		18.8	26.2
IIIn	1.1	8.0		8.0	9.1
IVe	2.3	1.1		1.1	3.4
IVw		3.6	7.3	10.9	10.9
VIe	2.3	1.4		1.4	3.7
VIIIs	1.5	1.6		1.6	3.1
TOTAL	35.5	168.0	11.7	179.7	215.2



Table C-5 (Continued)

CONSERVATION TREATMENT NEEDS ON CROPLAND, 1982,  
BY MLRA BY LAND CAPABILITY CLASS AND SUBCLASS

MLRA 12B

CLASS/ SUBCLASS	ADEQUATELY PROTECTED	EROSION CONTROL	DRAINAGE	TOTAL NEEDING TREATMENT	TOTAL
	-----1000 ACRES-----				
I	14.5	13.1	1.3 *	14.4	28.9
IIe	70.5	245.2		245.2	315.7
IIw	76.3	59.0	24.8	83.8	160.1
IIIe	21.1	117.5		117.5	138.6
IIIe	1.3				1.3
IIIw	6.2	32.0	2.9	34.9	41.1
IVe	6.8	30.4		30.4	37.2
IVs		3.0		3.0	3.0
IVw	38.5	25.2	15.8	41.0	79.5
VIe		3.9		3.9	3.9
VIIe	1.3	1.2		1.2	2.5
VIIe		1.2		1.2	1.2
TOTAL	236.5	531.7	44.8	576.5	813.0

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\* CLASS I SOILS ARE NORMALLY CONSIDERED WELL DRAINED; HOWEVER,  
BECAUSE OF TOPOGRAPHY, WETNESS PROBLEMS MAY EXIST IN SMALL AREAS

Table C-5 (Continued)

CONSERVATION TREATMENT NEEDS ON CROPLAND, 1982,  
BY MLRA BY LAND CAPABILITY CLASS AND SUBCLASS

MLRA 129/125

## TREATMENT NEEDED

CLASS/ SUBCLASS	ADEQUATELY PROTECTED	EROSION CONTROL	DRAINAGE	TOTAL NEEDING TREATMENT	TOTAL
	-----1000 ACRES-----				
I	4.0				4.0
IIe	54.6	206.5		206.5	261.1
IIw	6.1	5.5	1.2	6.7	12.8
IIIe	19.8	128.4		128.4	148.2
IIIw	3.8	7.8		7.8	11.6
IVe	14.7	27.0		27.0	41.7
IVw	3.5	7.1	1.3	8.4	11.9
VIe		3.6		3.6	3.6
VIIe		4.4		4.4	4.4
VIIIs	0.8	4.1		4.1	4.9
TOTAL	107.3	394.4	2.5	396.9	504.2

Table C-5 (Continued)

CONSERVATION TREATMENT NEEDS ON CROPLAND, 1982,  
BY MLRA BY LAND CAPABILITY CLASS AND SUBCLASS

MLRA 133A/152A

CLASS/ SUBCLASS	ADEQUATELY PROTECTED	EROSION CONTROL	DRAINAGE	TOTAL NEEDING TREATMENT	TOTAL
	-----1000 ACRES-----				
I	162.9	112.0	10.4*	122.4	285.3
IIe	285.9	503.2		503.2	789.1
II <sub>s</sub>	70.2	16.6		16.6	86.8
II <sub>w</sub>	101.0	106.3	23.7	130.0	231.0
IIIe	81.4	257.7		257.7	339.1
III <sub>s</sub>	138.4	113.4		113.4	251.8
III <sub>w</sub>	22.0	17.2	0.7	17.9	39.9
IVe	17.1	59.1		59.1	76.2
IV <sub>s</sub>	25.9	59.7		59.7	85.6
IV <sub>w</sub>	26.0	26.4	16.2	42.6	68.6
V <sub>w</sub>	28.0	3.7	10.0	13.7	41.7
VIe	7.4	41.5		41.5	48.9
VI <sub>s</sub>	17.2	17.9		17.9	35.1
VIIe	8.8	13.6		13.6	22.4
VII <sub>s</sub>	0.5	5.5		5.5	6.0
TOTAL	992.7	1353.8	61.0	1414.8	2407.5

\* CLASS I SOILS ARE NORMALLY CONSIDERED WELL DRAINED; HOWEVER,  
BECAUSE OF TOPOGRAPHY, WETNESS PROBLEMS MAY EXIST IN SMALL AREAS



Table C-5 (Continued)

CONSERVATION TREATMENT NEEDS ON CROPLAND, 1982,  
BY MLRA BY LAND CAPABILITY CLASS AND SUBCLASS

MLRA 135

TREATMENT NEEDED

CLASS/ SUBCLASS	ADEQUATELY PROTECTED	EROSION CONTROL	DRAINAGE	TOTAL NEEDING TREATMENT	TOTAL
			1000 ACRES		
I	1.3	1.3		1.3	2.6
IIe	10.4	90.8		90.8	101.2
IIw	24.9	42.0	18.8	60.8	85.7
IIIe	21.4	92.8		92.8	114.2
IIIs	4.3				4.3
IIIW	13.4	23.9	2.6	26.5	39.9
IVe	11.4	52.2		52.2	63.6
IVw	21.8	10.0	11.9	21.9	43.7
Vw		0.9	1.1	2.0	2.0
VIe	7.8	15.0		15.0	22.8
VIIIs		1.2		1.2	1.2
TOTAL	116.7	330.1	34.4	364.5	481.2

Table C-5 (Continued)

CONSERVATION TREATMENT NEEDS ON CROPLAND, 1982,  
BY MLRA BY LAND CAPABILITY CLASS AND SUBCLASS

MLRA 136

CLASS/ SUBCLASS	ADEQUATELY PROTECTED	EROSION CONTROL	DRAINAGE	TOTAL NEEDING TREATMENT	TOTAL
-----1000 ACRES-----					
I	2.4	2.0		2.0	4.4
IIe	10.3	8.4		8.4	18.7
IIw	1.4	4.9	3.8	8.7	10.1
IIIe	6.2	14.7		14.7	20.9
IIIs	1.2	1.1		1.1	2.3
IIIw	1.9	3.1		3.1	5.0
IVe	7.4	9.9		9.9	17.3
IVw		1.9		1.9	1.9
Vw	1.3				1.3
VIe	1.2	2.4		2.4	3.6
VIIe	1.3	2.4		2.4	3.7
TOTAL	34.6	50.8	3.8	54.6	89.2

-----  
SOURCE: 1982 NRI

Table C-6

CONSERVATION TREATMENT NEEDS ON PASTURELAND, 1982, BY LAND CAPABILITY CLASS AND SUBCLASS

CLASS/ SUBCLASS	ADEQUATELY PROTECTED	TREATMENT NOT FEASIBLE	EROSION CONTROL	TREATMENT NEEDED			REESTAB- LISHMENT	TOTAL NEEDING TREATMENT	TOTAL
				DRAINAGE	PROTECTION	IMPROVEMENT			
-----1000 ACRES-----									
I	39.1				4.0	10.3		14.3	53.4
IIe	493.9		8.6		49.8	193.4	68.8	320.6	814.5
IIIs	12.5		1.2			7.0	4.8	13.0	25.5
IIw	222.9		5.0	9.7	12.9	85.1	59.1	171.8	394.7
IIIe	422.3		21.1		41.9	216.1	101.0	380.1	802.4
IIIs	57.6		0.5		9.3	24.5	10.7	45.0	102.6
IIIw	47.5		1.5		6.4	31.3	13.1	52.3	99.8
IVe	207.5		31.0		36.0	162.7	75.6	305.3	512.8
IVs	42.4		1.3		11.7	21.9	8.0	42.9	85.3
IVw	80.0	2.6	0.9	15.9	8.1	73.8	39.4	138.1	220.7
Vw	36.8		0.5	14.1	2.3	52.3	13.4	82.6	119.4
VIe	103.9		40.7		17.3	97.9	31.2	187.1	291.0
VIs	23.6		0.4		7.9	13.8	1.2	23.3	46.9
VIIe	57.8		5.2		10.3	48.0	29.7	93.2	151.0
VIIIs	32.8	2.5	4.2		2.5	44.1	7.5	58.3	93.6
VIIw	3.0								3.0
STATE TOT	1883.6	5.1	122.1	39.7	220.4	1082.2	463.5	1927.9	3816.6

SOURCE: 1982 NRI



Table C-6 (Continued)

CONSERVATION TREATMENT NEEDS ON PASTURELAND, 1982, BY MLRA

MLRA	ADEQUATELY PROTECTED	TREATMENT NOT FEASIBLE	EROSION CONTROL	TREATMENT NEEDED			REESTAB- LISHMENT	TOTAL NEEDING TREATMENT	TOTAL
				DRAINAGE	PROTECTION	IMPROVEMENT			
-----1000 ACRES-----									
122	26.9		2.7		7.2	38.2	24.4	72.5	99.4
128	281.3		1.1		25.6	163.5	64.6	254.8	536.1
129/125	317.6	2.5	3.4	4.0	31.7	202.3	62.8	304.2	624.3
133A/152A	909.7	2.6	47.1	13.6	95.6	387.6	170.0	713.9	1626.2
135	259.4		64.3	22.1	18.3	185.5	106.5	396.7	656.1
136	88.7		3.5		42.0	105.1	35.2	185.8	274.5
STATE TOT	1883.6	5.1	122.1	39.7	220.4	1082.2	463.5	1927.9	3816.6

-----  
SOURCE: 1982 NRI

Table C-6 (Continued)

## CONSERVATION TREATMENT NEEDS ON PASTURELAND, 1982, BY MLRA BY LAND CAPABILITY CLASS AND SUBCLASS

MLRA 122

CLASS/ SUBCLASS	ADEQUATELY PROTECTED	TREATMENT NOT FEASIBLE	EROSION CONTROL	TREATMENT NEEDED			REESTAB- LISHMENT	TOTAL NEEDING TREATMENT	TOTAL
				DRAINAGE	PROTECTION	IMPROVEMENT			
-----1000 ACRES-----									
Ile	14.9		2.7		4.9	7.2	5.6	20.4	35.3
IIw	4.8				1.1	6.6	2.7	10.4	15.2
IIIe	4.4					9.2	7.1	16.3	20.7
IIIw	1.2								1.2
IVe						1.1	2.4	3.5	3.5
IVw	1.6					3.6		3.6	5.2
VIe					1.2	1.1	2.2	4.5	4.5
VIIe							1.2	1.2	1.2
VIIIs						9.4	3.2	12.6	12.6
TOTAL	26.9		2.7		7.2	38.2	24.4	72.5	99.4

Table C-6 (Continued)

MLRA 128

CLASS/ SUBCLASS	ADEQUATELY PROTECTED	TREATMENT NOT FEASIBLE	EROSION CONTROL	TREATMENT NEEDED			REESTAB- LISHMENT	TOTAL NEEDING TREATMENT	TOTAL
				DRAINAGE	PROTECTION	IMPROVEMENT			
-----1000 ACRES-----									
I	2.5								2.5
IIe	80.3				9.6	42.7	14.6	66.9	147.2
IIIs						2.7		2.7	2.7
IIw	45.5					21.0	7.6	28.6	74.1
IIIe	59.7				2.5	31.5	18.0	52.0	111.7
IIIw	25.0				2.8	10.1	4.2	17.1	42.1
IVe	24.0		1.1		2.2	17.3	12.9	33.5	57.5
IVs					2.6	5.2		7.8	7.8
IVw	15.0				4.7	11.6	2.5	18.8	33.8
VIe	10.3					8.9	2.6	11.5	21.8
VIIs						2.5		2.5	2.5
VIIe	10.0				1.2	5.0	2.2	8.4	18.4
VIIIs	9.0					5.0		5.0	14.0
TOTAL	281.3		1.1		25.6	163.5	64.6	254.8	536.1



Table C-6 (Continued)

CONSERVATION TREATMENT NEEDS ON PASTURELAND, 1982, BY MLRA BY LAND CAPABILITY CLASS AND SUBCLASS

MLRA 129/125

CLASS/ SUBCLASS	ADEQUATELY PROTECTED	TREATMENT NOT FEASIBLE	EROSION CONTROL	TREATMENT NEEDED			REESTAB- LISHMENT	TOTAL NEEDING TREATMENT	TOTAL
				DRAINAGE	PROTECTION	IMPROVEMENT			
-----1000 ACRES-----									
Ile	121.3				4.3	55.2	12.8	72.3	193.6
IIw	18.2				3.0	14.8	7.0	24.8	43.0
IIIe	95.8				12.0	64.8	19.3	96.1	191.9
IIIw	4.3				2.5	5.8	3.2	11.5	15.8
IVe	37.1		2.3		1.3	22.2	5.5	31.3	68.4
IVw	1.6			4.0		7.7	1.9	13.6	15.2
VIe	11.8				6.1	9.0		15.1	26.9
VIIs	0.9					3.4		3.4	4.3
VIIe	16.0		1.1			6.1	10.7	17.9	33.9
VIIIs	10.6	2.5			2.5	13.3	2.4	18.2	31.3
TOTAL	317.6	2.5	3.4	4.0	31.7	202.3	62.8	304.2	624.3

Table C-6 (Continued)

CONSERVATION TREATMENT NEEDS ON PASTURELAND, 1982, BY MLRA BY LAND CAPABILITY CLASS AND SUBCLASS

MLRA 133A/152A

CLASS/ SUBCLASS	ADEQUATELY PROTECTED	TREATMENT NOT FEASIBLE	EROSION CONTROL	TREATMENT NEEDED			REESTAB- LISHMENT	TOTAL NEEDING TREATMENT	TOTAL
				DRAINAGE	PROTECTION	IMPROVEMENT			
-----1000 ACRES-----									
I	32.1				4.0	9.1		13.1	45.2
IIe	229.0		3.6		25.4	62.9	17.5	109.4	338.4
IIIs	12.5		1.2			4.3	4.8	10.3	22.8
IIW	88.8		4.1	5.8		14.6	13.2	37.7	126.5
IIIe	186.7		8.6		11.5	49.9	20.4	90.4	277.1
IIIs	56.3		0.5		9.3	24.5	10.7	45.0	101.3
IIIW	7.8		1.5			1.3	0.7	3.5	11.3
IVe	85.2		9.6		19.3	56.1	33.6	118.6	203.8
IVs	42.4		1.3		9.1	16.7	8.0	35.1	77.5
IVW	24.3	2.6		4.1	1.1	33.0	17.0	55.2	82.1
VW	32.4		0.5	3.7	2.3	35.3	13.4	55.2	87.6
VIe	44.2		8.7		4.0	35.6	13.2	61.5	105.7
VIIs	22.7		0.4		7.9	7.9	1.2	17.4	40.1
VIIe	30.5		4.1		1.7	24.6	14.4	44.8	75.3
VIIIs	11.8		3.0			11.8	1.9	16.7	28.5
VIIW	3.0								3.0
TOTAL	909.7	2.6	47.1	13.6	95.6	387.6	170.0	713.9	1626.2

Table C-6 (Continued)

CONSERVATION TREATMENT NEEDS ON PASTURELAND, 1982, BY MLRA BY LAND CAPABILITY CLASS AND SUBCLASS

MLRA 135

CLASS/ SUBCLASS	ADEQUATELY PROTECTED	TREATMENT NOT FEASIBLE	EROSION CONTROL	TREATMENT NEEDED			REESTAB- LISHMENT	TOTAL NEEDING TREATMENT	TOTAL
				DRAINAGE	PROTECTION	IMPROVEMENT			
-----1000 ACRES-----									
I	1.3								1.3
IIe	37.0				1.3	14.9	11.2	27.4	64.4
IIw	55.2		0.9	3.9	8.8	22.9	23.6	60.1	115.3
IIIe	58.0		12.5		3.8	31.0	25.1	72.4	130.4
IIIw	6.8					9.1	3.9	13.0	19.8
IVe	26.9		16.8		2.1	38.3	13.9	71.1	98.0
IVw	36.1		0.9	7.8	2.3	16.6	18.0	45.6	81.7
Vw	3.1			10.4		14.4		24.8	27.9
VIe	35.0		32.0			34.5	10.8	77.3	112.3
VIIe						3.8		3.8	3.8
VIIIs			1.2					1.2	1.2
TOTAL	259.4		64.3	22.1	18.3	185.5	106.5	396.7	656.1



Table C-6 (Continued)

CONSERVATION TREATMENT NEEDS ON PASTURELAND, 1982, BY MLRA BY LAND CAPABILITY CLASS AND SUBCLASS

MLRA 136

CLASS/ SUBCLASS	ADEQUATELY PROTECTED	TREATMENT NOT FEASIBLE	EROSION CONTROL	TREATMENT NEEDED			REESTAB- LISHMENT	TOTAL NEEDING TREATMENT	TOTAL
				DRAINAGE	PROTECTION	IMPROVEMENT			
-----1000 ACRES-----									
I	3.2					1.2		1.2	4.4
IIe	11.4		2.3		4.3	10.5	7.1	24.2	35.6
IIw	10.4					5.2	5.0	10.2	20.6
IIIe	17.7				12.1	29.7	11.1	52.9	70.6
IIIs	1.3								1.3
IIIw	2.4				1.1	5.0	1.1	7.2	9.6
IVe	34.3		1.2		11.1	27.7	7.3	47.3	81.6
IVw	1.4					1.3		1.3	2.7
Vw	1.3					2.6		2.6	3.9
VIe	2.6				6.0	8.8	2.4	17.2	19.8
VIIe	1.3				7.4	8.5	1.2	17.1	18.4
VIIIs	1.4					4.6		4.6	6.0
TOTAL	88.7		3.5		42.0	105.1	35.2	185.8	274.5

-----  
SOURCE: 1982 NRI

Table C-7

CONSERVATION TREATMENT NEEDS ON FOREST LAND, 1982,  
BY LAND CAPABILITY CLASS AND SUBCLASS

CLASS/ SUBCLASS	ADEQUATELY PROTECTED	TREATMENT NOT FEASIBLE	EROSION CONTROL	TIMBER ESTABLISH- MENT AND REINFORCE- MENT	FORAGE PROTECTION	TOTAL NEEDING TREATMENT	TOTAL	
				STAND/CROP IMPROVEMENT	TIMBER IMPROVEMENT OR REESTAB- LISHMENT			
-----1000 ACRES-----								
I	57.5		1.3	46.1	49.0	96.4	153.9	
IIe	519.7	6.1	11.8	233.1	511.1	756.0	1281.8	
IIe	39.0			17.2	32.5	49.7	88.7	
IIw	420.2	8.5		125.8	410.4	1.2	537.4	966.1
IIIe	671.4	3.5	13.6	301.7	856.5	1.3	1173.1	1848.0
IIIe	211.4		3.1	95.5	171.4	2.6	272.6	484.0
IIIw	118.9		1.8	64.6	189.3		255.7	374.6
IVe	684.4	9.8	31.5	415.0	1098.6	1.3	1546.4	2240.6
IVe	212.7		13.3	97.4	225.5		336.2	548.9
IVw	369.5	7.0	2.5	153.8	452.4		608.7	985.2
Vw	636.3	5.6	2.5	260.7	871.7	0.9	1135.8	1777.7
VIe	624.0	24.8	36.3	435.4	900.0	3.8	1375.5	2024.3
VIe	136.0	2.4	9.1	171.3	257.5	1.2	439.1	577.5
VIw	49.7			10.7	13.4		24.1	73.8
VIIe	1377.2	121.5	76.6	790.9	2526.2	1.8	3395.5	4894.2
VIIe	517.0	66.6	16.6	369.6	1184.7	1.3	1572.2	2155.8
VIIw	45.8	1.7		11.5	85.7		97.2	144.7
VIIIe	3.5	3.5	5.3	1.2			6.5	13.5
STATE TOTAL	6694.2	261.0	225.3	3601.5	9835.9	15.4	13678.1	20633.3

-----  
SOURCE: 1982 NRI

Table C-7 (Continued)

## CONSERVATION TREATMENT NEEDS ON FOREST LAND, 1982, BY MLRA

MLRA	ADEQUATELY PROTECTED	TREATMENT NOT FEASIBLE	EROSION CONTROL	TIMBER ESTABLISH- MENT AND REINFORCE- MENT	TIMBER STAND/CROP IMPROVEMENT	FORAGE PROTECTION OR REESTAB- LISHMENT	TOTAL NEEDING TREATMENT	TOTAL
	-----1000 ACRES-----							
122	2.8			9.5	120.9		130.4	133.2
128	610.5	71.6	8.5	285.3	984.5	2.4	1280.7	1962.8
129/125	587.6	85.2	19.3	419.7	1791.9		2230.9	2903.7
133A/152A	4358.6	71.9	165.8	2193.4	5695.3	6.5	8061.0	12491.5
135	351.0	5.4	23.4	125.5	366.9		515.8	872.2
136	783.7	26.9	8.3	568.1	876.4	6.5	1459.3	2269.9
STATE TOTAL	6694.2	261.0	225.3	3601.5	9835.9	15.4	13678.1	20633.3

-----  
SOURCE: 1982 NRI



Table C-7 (Continued)

CONSERVATION TREATMENT NEEDS ON FOREST LAND, 1982,  
BY MLRA BY LAND CAPABILITY CLASS AND SUBCLASS

MLRA 122

TREATMENT NEEDED

CLASS/ SUBCLASS	ADEQUATELY PROTECTED	TREATMENT NOT FEASIBLE	EROSION CONTROL	TIMBER	FORAGE	TOTAL NEEDING TREATMENT	TOTAL
				ESTABLISH- MENT AND REINFORCE- MENT	PROTECTION TIMBER IMPROVEMENT STAND/CROP OR REESTAB- IMPROVEMENT LISHMENT		
-----1000 ACRES-----							
Ile				1.6	13.5	15.1	15.1
IIw					9.9	9.9	9.9
IIIe				3.1	28.9	32.0	32.0
IIIw	1.6			1.6	5.0	6.6	8.2
IVw	1.2				20.0	20.0	21.2
VIe					5.7	5.7	5.7
VIIe					8.1	8.1	8.1
VIIIs				3.2	29.8	33.0	33.0
TOTAL	2.8			9.5	120.9	130.4	133.2

Table C-7 (Continued)

CONSERVATION TREATMENT NEEDS ON FOREST LAND IN 1982,  
BY MLRA BY LAND CAPABILITY CLASS/SUBCLASS

MLRA 128

CLASS/ SUBCLASS	ADEQUATELY PROTECTED	TREATMENT NOT FEASIBLE	EROSION CONTROL	TIMBER ESTABLISH- MENT AND REINFORCE- MENT	FORAGE PROTECTION		TOTAL NEEDING TREATMENT	TOTAL
					TIMBER STAND/CROP IMPROVEMENT	IMPROVEMENT OR REESTAB- LISHMENT		
					-----1000 ACRES-----			
I				1.2	1.3		2.5	2.5
IIe	37.1		1.3	29.1	48.4		78.8	115.9
IIw	39.3			4.9	55.5	1.2	61.6	100.9
IIIe	75.1		2.4	41.1	112.2		155.7	230.8
IIIe					4.1		4.1	4.1
IIIw	24.8			11.8	28.0		39.8	64.6
IVe	68.7			18.3	64.3		82.6	151.3
IVe	31.9			10.4	17.6		28.0	59.9
IVw	29.3	4.4		10.7	72.9		83.6	117.3
VIe	59.9	1.3	1.2	35.5	73.3	1.2	111.2	172.4
VIe	8.7		1.3	4.3	23.7		29.3	38.0
VIIe	105.0	19.6	1.0	76.3	138.2		215.5	340.1
VIIe	129.4	46.3	1.3	40.5	345.0		386.8	562.5
VIIIe	1.3			1.2			1.2	2.5
TOTAL	610.5	71.6	8.5	285.3	984.5	2.4	1280.7	1962.8

Table C-7 (Continued)

CONSERVATION TREATMENT NEEDS ON FOREST LAND, 1982,  
BY MLRA BY LAND CAPABILITY CLASS AND SUBCLASS

MLRA 129/125

CLASS/ SUBCLASS	ADEQUATELY PROTECTED	TREATMENT NOT FEASIBLE	EROSION CONTROL	TIMBER	FORAGE	TOTAL NEEDING TREATMENT	TOTAL
				ESTABLISH- MENT AND	PROTECTION		
				REINFORCE- MENT	TIMBER IMPROVEMENT STAND/CROP OR REESTAB- LISHMENT		
-----1000 ACRES-----							
Ile	31.5	2.3		15.4	76.6	92.0	125.8
IIw	11.9	1.5		15.0	29.3	44.3	57.7
IIIe :	61.6	1.1		41.7	209.6	251.3	314.0
IIIs	1.1						1.1
IIIw	6.6		1.8	4.9	16.9	23.6	30.2
IVe	56.9	7.2	2.4	49.0	135.9	187.3	251.4
IVs	3.8						3.8
IVw	7.8			4.4	17.9	22.3	30.1
Vw					6.1	6.1	6.1
VIe	54.9	10.7	1.2	45.5	98.5	145.2	210.8
VIs	2.2			9.1	19.1	28.2	30.4
VIIe	273.3	47.7	11.4	182.8	849.7	1043.9	1364.9
VIIIs	73.8	11.2	2.5	51.9	332.3	386.7	471.7
VIIIIs	2.2	3.5					5.7
TOTAL	587.6	85.2	19.3	419.7	1791.9	2230.9	2903.7



Table C-7 (Continued)

CONSERVATION TREATMENT NEEDS ON FOREST LAND IN 1982,  
BY MLRA BY LAND CAPABILITY CLASS/SUBCLASS

MLRA 133A/152A

CLASS/ SUBCLASS	ADEQUATELY PROTECTED	TREATMENT NOT FEASIBLE	EROSION CONTROL	TIMBER	FORAGE		TOTAL NEEDING TREATMENT	TOTAL
				ESTABLISH- MENT AND REINFORCE- MENT	PROTECTION	TIMBER IMPROVEMENT STAND/CROP OR REESTAB- IMPROVEMENT LISHMENT		
-----1000 ACRES-----								
I	53.8		1.3	43.6	45.2		90.1	143.9
IIe	368.8	3.8	5.7	146.5	321.4		473.6	846.2
IIe	39.0			17.2	32.5		49.7	88.7
IIw	304.7	2.7		89.3	271.5		360.8	668.2
IIIe	360.8	2.4	8.8	137.3	356.9	1.3	504.3	867.5
IIIe	210.3		3.1	91.2	166.1	2.6	263.0	473.3
IIIw	36.2			16.4	71.9		88.3	124.5
IVe	348.2	1.2	24.8	201.7	637.3		863.8	1213.2
IVe	177.0		13.3	82.8	207.9		304.0	481.0
IVw	253.1	2.6		120.6	278.7		399.3	655.0
Vw	617.1	5.6	2.5	239.2	812.3	0.9	1054.9	1677.6
VIe	332.7	5.4	24.9	211.4	440.3		676.6	1014.7
VIe	114.5	2.4	7.8	155.4	214.7	1.2	379.1	496.0
VIw	47.2			6.4	12.2		18.6	65.8
VIIe	819.0	42.8	59.8	378.0	1359.5	0.5	1797.8	2659.6
VIIe	230.4	1.3	8.5	244.9	381.2		634.6	866.3
VIIw	45.8	1.7		11.5	85.7		97.2	144.7
VIIIe			5.3				5.3	5.3
TOTAL	4358.6	71.9	165.8	2193.4	5695.3	6.5	8061.0	12491.5

Table C-7 (Continued)

CONSERVATION TREATMENT NEEDS ON FOREST LAND, 1982,  
BY MLRA BY LAND CAPABILITY CLASS AND SUBCLASS

MLRA 135

CLASS/ SUBCLASS	ADEQUATELY PROTECTED	TREATMENT NOT FEASIBLE	EROSION CONTROL	TIMBER ESTABLISH- MENT AND REINFORCE- MENT	FORAGE PROTECTION TIMBER IMPROVEMENT STAND/CROP OR REESTAB- IMPROVEMENT LISHMENT	TOTAL NEEDING TREATMENT	TOTAL
	-----1000 ACRES-----						
IIe	28.1		4.8	9.1	20.5	34.4	62.5
IIw	41.8	4.3		11.6	37.8	49.4	95.5
IIIe	49.2		0.9	13.6	54.8	69.3	118.5
IIIs				3.1		3.1	3.1
IIIw	23.3			7.9	40.6	48.5	71.8
IVe	34.3		3.1	11.1	40.4	54.6	88.9
IVs				3.1		3.1	3.1
IVw	71.2		2.5	11.8	54.3	68.6	139.8
Vw	14.3			3.9	26.8	30.7	45.0
VIe	76.6	1.1	9.0	31.3	65.6	105.9	183.6
VI s	0.9						0.9
VIw				3.1		3.1	3.1
VIIe	5.8		3.1	15.9	22.2	41.2	47.0
VII s	5.5				3.9	3.9	9.4
TOTAL	351.0	5.4	23.4	125.5	366.9	515.8	872.2

Table C-7 (Continued)

CONSERVATION TREATMENT NEEDS ON FOREST LAND, 1982,  
BY MLRA BY LAND CAPABILITY CLASS AND SUBCLASS

MLRA 136

CLASS/ SUBCLASS	ADEQUATELY PROTECTED	TREATMENT NOT FEASIBLE	EROSION CONTROL	TIMBER	FORAGE		TOTAL NEEDING TREATMENT	TOTAL
				ESTABLISH- MENT AND REINFORCE- MENT	PROTECTION	TIMBER IMPROVEMENT STAND/CROP OR REESTAB- IMPROVEMENT LISHMENT		
-----1000 ACRES-----								
I	3.7			1.3	2.5		3.8	7.5
IIe	54.2			31.4	30.7		62.1	116.3
IIw	22.5			5.0	6.4		11.4	33.9
IIIe	124.7		1.5	64.9	94.1		160.5	285.2
IIIs				1.2	1.2		2.4	2.4
IIIw	26.4			22.0	26.9		48.9	75.3
IVe	176.3	1.4	1.2	134.9	220.7	1.3	358.1	535.8
IVs				1.1			1.1	1.1
IVw	6.9			6.3	8.6		14.9	21.8
Vw	4.9			17.6	26.5		44.1	49.0
VIe	99.9	6.3		111.7	216.6	2.6	330.9	437.1
VIs	9.7			2.5			2.5	12.2
VIw	2.5			1.2	1.2		2.4	4.9
VIIe	174.1	11.4	1.3	137.9	148.5	1.3	289.0	474.5
VIIIs	77.9	7.8	4.3	29.1	92.5	1.3	127.2	212.9
TOTAL	783.7	26.9	8.3	568.1	876.4	6.5	1459.3	2269.9

SOURCE: 1982 NRI



Table C-8

CONSERVATION TREATMENT NEEDS ON MINOR USES, 1982.  
BY LAND CAPABILITY CLASS AND SUBCLASS

CLASS/ SUBCLASS	TREATMENT NEEDED			TOTAL <u>1/</u>
	ADEQUATELY PROTECTED	TREATMENT NOT FEASIBLE	EROSION CONTROL	
	-----1000 ACRES-----			
I	13.7	1.3	0.5	15.5
IIe	106.1	1.5	9.2	116.8
IIIs	7.0			7.0
IIw	4.2		9.9	14.1
IIIe	53.5		18.3	71.8
IIIs	13.3	1.3	3.7	18.3
IIw	12.4	1.3	1.4	15.1
IVe	23.4	1.2	27.0	51.6
IVs	1.0		1.2	2.2
IVw	18.8	2.6	1.3	22.7
Vw	14.4		5.3	19.7
VIe	17.1	2.7	10.8	30.6
VIIs	1.6		9.0	10.6
VIw	1.6			1.6
VIIe	5.4		39.8	45.2
VIIIs	3.5	1.3	68.0	72.8
VIIw	8.1	16.7	4.5	29.3
VIIIIs	4.0	4.8	2.8	11.6
STATE TOTAL	309.1	34.7	212.7	556.5

1/ DOES NOT INCLUDE SMALL BUILT-UP AREAS

SOURCE: 1982 NRI

Table C-8 (Continued)

CONSERVATION TREATMENT NEEDS ON MINOR USES, 1982,  
BY MLRA

MLRA	TREATMENT NEEDED			TOTAL <u>1/</u>
	ADEQUATELY PROTECTED	TREATMENT NOT FEASIBLE	EROSION CONTROL	
	-----1000 ACRES-----			
122	4.9		1.0	5.9
128	49.5	1.3	31.4	82.2
129/125	59.9	1.2	88.8	149.9
133A/152A	171.0	27.3	79.7	278.0
135	7.7		10.5	18.2
136	16.1	4.9	1.3	22.3
STATE TOTAL	309.1	34.7	212.7	556.5

-----  
1/ DOES NOT INCLUDE SMALL BUILT-UP AREAS

SOURCE: 1982 NRI

Table C-8 (Continued)

CONSERVATION TREATMENT NEEDS ON MINOR USES, 1982, BY MLRA,  
BY LAND CAPABILITY CLASS AND SUBCLASS

MLRA 122		TREATMENT NEEDED		
CLASS/ SUBCLASS	ADEQUATELY PROTECTED	TREATMENT NOT FEASIBLE	EROSION CONTROL	TOTAL <u>1/</u>
-----1000 ACRES-----				
IIe	3.9		1.0	4.9
VIIe	1.0			1.0
TOTAL	4.9		1.0	5.9

MLRA 128		TREATMENT NEEDED		
CLASS/ SUBCLASS	ADEQUATELY PROTECTED	TREATMENT NOT FEASIBLE	EROSION CONTROL	TOTAL <u>1/</u>
-----1000 ACRES-----				
I	0.6		0.5	1.1
IIe	22.6		3.8	26.4
IIw	2.5		9.9	12.4
IIIe	9.9		2.4	12.3
IIIw	2.1			2.1
IVe	9.2		10.0	19.2
VIe			1.2	1.2
VIe			1.2	1.2
VIIe			1.2	1.2
VIIe	1.3	1.3	1.2	3.8
VIIIe	1.3			1.3
TOTAL	49.5	1.3	31.4	82.2

1/ DOES NOT INCLUDE SMALL BUILT-UP AREAS



Table C-8 (Continued)

CONSERVATION TREATMENT NEEDS ON MINOR USES, 1982, BY MLRA,  
BY LAND CAPABILITY CLASS AND SUBCLASS

MLRA 129/125

TREATMENT NEEDED

CLASS/ SUBCLASS	ADEQUATELY PROTECTED	TREATMENT NOT FEASIBLE	EROSION CONTROL	TOTAL <u>1/</u>
-----1000 ACRES-----				
I	0.2			0.2
IIe	25.7		0.9	26.6
IIIe	21.8		1.5	23.3
IIIw	2.9			2.9
IVe	6.5	1.2	9.8	17.5
VIe	2.8		1.5	4.3
VIe			5.1	5.1
VIIe			26.8	26.8
VIIe			43.2	43.2
TOTAL	59.9	1.2	88.8	149.9

-----  
1/ DOES NOT INCLUDE SMALL BUILT-UP AREAS

Table C-8 (Continued)

CONSERVATION TREATMENT NEEDS ON MINOR USES, 1982, BY MLRA,  
BY LAND CAPABILITY CLASS AND SUBCLASS

MLRA 133A/152A

TREATMENT NEEDED

CLASS/ SUBCLASS	ADEQUATELY PROTECTED	TREATMENT NOT FEASIBLE	EROSION CONTROL	TOTAL <u>1/</u>
-----1000 ACRES-----				
I	12.9	1.3		14.2
IIe	47.4	0.4	2.9	50.7
IIe	6.6			6.6
IIw	1.7			1.7
IIIe	15.6		10.3	25.9
IIIs	11.9	1.3	3.7	16.9
IIIW	7.4		1.4	8.8
IVe	5.2		7.2	12.4
IVs	1.0		1.2	2.2
IVw	17.9	1.3	1.3	20.5
Vw	14.4		5.3	19.7
VIe	9.6	2.7	1.4	13.7
VIIs	1.6		2.7	4.3
VIW	1.6			1.6
VIIe	5.4		11.4	16.8
VIIIs			23.6	23.6
VIIW	8.1	16.7	4.5	29.3
VIIIIs	2.7	3.6	2.8	9.1
TOTAL	171.0	27.3	79.7	278.0

1/ DOES NOT INCLUDE SMALL BUILT-UP AREAS

Table C-8 (Continued)

CONSERVATION TREATMENT NEEDS ON MINOR USES, 1982, BY MLRA,  
BY LAND CAPABILITY CLASS AND SUBCLASS

MLRA 135		TREATMENT NEEDED		
CLASS/ SUBCLASS	ADEQUATELY PROTECTED	TREATMENT NOT FEASIBLE	EROSION CONTROL	TOTAL <u>1/</u>
-----1000 ACRES-----				
Ile	2.5		0.4	2.9
IIIs	0.4			0.4
IIIe	1.8		4.1	5.9
IIIs	1.4			1.4
IVw	0.9			0.9
VIe	0.7		5.6	6.3
VIIe			0.4	0.4
TOTAL	7.7		10.5	18.2

MLRA 136		TREATMENT NEEDED		
CLASS/ SUBCLASS	ADEQUATELY PROTECTED	TREATMENT NOT FEASIBLE	EROSION CONTROL	TOTAL <u>1/</u>
-----1000 ACRES-----				
Ile	4.0	1.1	0.2	5.3
IIIe	4.4			4.4
IIIw		1.3		1.3
IVe	2.5			2.5
IVw		1.3		1.3
VIe	4.0		1.1	5.1
VIIIs	1.2			1.2
VIIIIs		1.2		1.2
TOTAL	16.1	4.9	1.3	22.3

1/ DOES NOT INCLUDE SMALL BUILT-UP AREAS

SOURCE: 1982 NRI



## EROSION AND SEDIMENT FOR HYDROLOGIC SUBREGION 313 APALACHICOLA

REACH	DRAINAGE AREA 1000 ACRES	EROSION $\frac{1}{2}$ 1000 TONS	-----SEDIMENT 1000 TONS-----					REMARKS
			FROM D.A.	BRT FWD	TRAPPED	PASSED	EXPORT	
CHATT @ WEST POINT LAKE	91.0	65.4	16.4	0	14.7	1.6		
CHATT @ LANGDALE DAM	66.8	48.0	12.0	1.6	12.3	1.4		
CHATT @ RIVERVIEW DAM	13.8	9.9	2.9	1.4	3.6	0.6		
CHATT @ BARTLETTS FERRY DAM	151.1	108.4	24.9	0.6	23.0	2.6		
CHATT @ GOAT ROCK DAM	29.2	21.0	5.7	2.6	5.8	2.5		
CHATT @ OLIVER DAM	8.3	5.9	1.8	2.5	3.0	1.3		
CHATT @ DAMS @ PHENIX CITY				1.3	0.1	1.1		
CHATT @ WALTER GEORGE L&D	911.7	1790.1	358.0	1.1	323.2	35.9		
CHATT @ ANDREWS L&D	290.4	1302.9	286.6	35.9	258.1	64.5		
LOWER CHATTAHOOCHEE	84.7	380.0	98.8	64.5		163.3	163.3	WOODRUFF L&D
CHIPOLA RIVER TRIBS	165.3	743.3	185.8			185.8	185.8	FLORIDA
TOTAL	1812.3	4474.9			643.8			349.1

## EROSION AND SEDIMENT FOR HYDROLOGIC SUBREGION 314 CHOCTAWHATCHEE-ESCAMBIA

REACH	DRAINAGE AREA 1000 ACRES	EROSION $\frac{1}{2}$ 1000 TONS	-----SEDIMENT 1000 TONS-----					REMARKS
			FROM D.A.	BRT FWD	TRAPPED	PASSED	EXPORT	
YELLOW RIVER TRIBS	327.7	668.0	147.0			147.0	147.0	FLORIDA
BLACKWATER RIVER	94.6	203.5	50.9			50.9	50.9	FLORIDA
PERDIDO RIVER	428.6	2489.3	522.8			522.8	522.8	PERDIDO BAY
PERDIDO BAY TRIBS	109.6	637.0	152.9			152.9	152.9	PERDIDO BAY
LAKE THOLOCCO	53.9	244.0	63.4		57.1	6.3		
CHOCTAWHATCHEE/PEA RIVERS	1902.4	8440.8	1603.8	6.3		1610.1	1610.1	FLORIDA
LOWER CHOC IND TRIBS	43.3	213.8	59.9			59.9	59.9	FLORIDA
CONECUH @ GANTT RES	410.4	946.5	208.2		187.4	20.8		
CONECUH @ POINT "A" RES	407.2	763.7	162.1	20.8	155.5	27.4		
CONECUH RIVER	1413.4	2862.2	572.4	27.4		599.8	599.8	FLORIDA
ESCAMBIA RIVER	232.1	356.5	82.0			82.0	82.0	FLORIDA
TOTAL	5423.2	17825.3			400.0			3225.4

$\frac{1}{2}$  TOTAL EROSION INCLUDES ALL 1982 NRI EROSION AND ESTIMATED EROSION FROM BUILT-UP, FEDERAL LANDS, ROADS, ETC., NOT REPORTED IN 1982 NRI.

SOURCE: 1982 NRI

Table C-9 (Continued)

## EROSION AND SEDIMENT FOR HYDROLOGIC SUBREGION 317 PASCAGOULA

REACH	DRAINAGE AREA 1000 ACRES	EROSION 1/ 1000 TONS	-----SEDIMENT 1000 TONS-----				REMARKS
			FROM D.A.	BRT FWD	TRAPPED	PASSED	
RED CREEK	42.3	90.9	23.6			23.6	MS
BIG CREEK LAKE	67.4	145.2	36.3		32.7	3.6	
ESCATAMPA RIVER & BIG CK	381.1	820.5	221.5	3.6		225.2	MS
MISS COASTAL TRIPS	69.6	116.3	34.9			34.9	MS SOUND
TOTAL	560.4	1172.9			32.7		283.7

## EROSION AND SEDIMENT FOR HYDROLOGIC SUBREGIONS 602/603 TENNESSEE

REACH	DRAINAGE AREA 1000 ACRES	EROSION 1/ 1000 TONS	-----SEDIMENT 1000 TONS-----				REMARKS
			FROM D.A.	BRT FWD	TRAPPED	PASSED	
NICKAJACK RES TRIPS	33.8	93.0	25.1			25.1	NICKAJACK RES
TENN @ GUNTERSVILLE RES	1053.0	2905.3	726.3		653.7	72.6	
UPPER ELK	0.3	1.2	0.5			0.5	TN
TENN @ WHEELER DAM	1867.0	8697.8	1652.6	72.6	1552.7	172.5	
TENN @ WILSON RES	468.3	2792.8	642.3	172.5	733.3	81.5	
PICKWICK TRIPS	555.3	3311.7	761.7	81.5		843.2	PICKWICK RES
BEAR CK UPPER LAKE	65.3	335.4	83.9		75.5	8.4	
BEAR CK LOWER LAKE	74.6	383.4	95.9	8.4	93.8	10.4	
BEAR CK/LTL BEAR LAKE	46.2	237.5	61.8		55.6	6.2	
BEAR CK/CEDAR CK LAKE	115.2	591.9	142.1		127.9	14.2	
BEAR CREEK	89.8	461.5	106.1	308.0		136.9	MS
TOTAL	4368.8	19811.5			3292.5		1005.7

1/ TOTAL EROSION INCLUDES ALL 1982 NRI EROSION AND ESTIMATED EROSION FROM BUILT-UP, FEDERAL LANDS, ROADS, ETC., NOT REPORTED IN 1982 NRI

SOURCE: 1982 NRI

Table C-9 (Continued)

## EROSION AND SEDIMENT FOR HYDROLOGIC SUBREGION 316 MOBILE-TOMBIGBEE

REACH	DRAINAGE AREA 1000 ACRES	EROSION <u>1</u> / 1000 TONS	-----SEDIMENT 1000 TONS-----				REMARKS
			FROM D.A.	BRT FWD	TRAPPED	PASSED	EXPORT
SMITH LAKE	604.0	2460.8	516.8		465.1	51.7	
EIGHT MILE (CATOMA RES)	27.5	412.8	115.6		104.0	11.6	
HIGHLAND LAKE	19.4	203.6	57.0		51.3	5.7	
INLAND LAKE	25.8	271.5	62.4	5.7	61.3	6.8	
VILLAGE LAKE	54.4	572.2	148.8		133.9	14.9	
BL WARRIOR @ BANKHEAD L&D	1819.2	29430.9	5591.9	85.0	4825.4	851.5	
BL WARRIOR @ HOLT L&D	152.5	5446.4	1252.7	851.5	1788.6	315.6	
HARRIS LAKE (TUSC CO)	21.0	749.7	284.9		256.4	28.5	
LAKE TUSC	271.8	9706.9	2135.5		1922.0	213.6	
BL WARRIOR @ OLIVER L&D	95.8	3420.6	820.9	557.7	1171.8	206.8	
BL WARRIOR @ WARRIOR L&D	632.7	1611.5	338.4	206.8	463.4	81.8	TOMBIG @ DEMOPOLIS
UPPER TOMBIGBEE TRIBS	79.3	150.5	37.6			37.6	MS
BUTTAHATCHEE RIVER	425.6	807.6	177.7			177.7	MS
LUXAPALLILA/HELLS CK	424.0	6459.8	1421.2			1421.2	MS
TOMBIGBEE @ ALICEVILLE L&D	172.7	398.5	79.7	1421.2	1275.7	225.1	
TOMBIGBEE @ GAINESVILLE L&D	859.2	1596.7	319.3	225.1	462.8	81.7	
TOMBIGBEE @ DEMOPOLIS L&D	675.6	1578.0	315.6	81.8	357.7	39.2	
TOMBIGBEE @ COFFEEVILLE L&D	1550.7	4151.2	788.7	39.7	704.1	124.3	
MOBILE-TENSAN @ CAUSEWAY <u>2</u> / MOBILE BAY TRIBS	2420.4	4289.1	814.9	197.4	202.5	809.8	MOBILE BAY
	314.1	1287.6	386.3			386.3	MOBILE BAY
TOTAL	10645.7	75005.9			14246.0		2832.6

1 TOTAL EROSION INCLUDES ALL 1982 NRI EROSION AND ESTIMATED EROSION FROM BUILT-UP  
FEDERAL LANDS, ROADS, ETC., NOT REPORTED IN 1982 NRI

2 INCLUDES 767,700 ACRES OF ALABAMA RIVER DRAINAGE AREA DOWNSTREAM FROM  
CLAIBORNE LOCK AND DAM

SOURCE: 1982 NRI



Table C-9 (Continued)

## EROSION AND SEDIMENT FOR HYDROLOGIC SUBREGION 317 PASCAGOULA

REACH	DRAINAGE AREA 1000 ACRES	EROSION 1/ 1000 TONS	-----SEDIMENT 1000 TONS-----					REMARKS
			FROM D.A.	BRT FWD	TRAPPED	PASSED	EXPORT	
RED CREEK	42.3	90.9	23.6			23.6	23.6	MS
BIG CREEK LAKE	67.4	145.2	36.3		32.7	3.6		
ESCATAMPA RIVER & BIG CK	381.1	820.5	221.5	3.6		225.2	225.2	MS
MISS COASTAL TRIBS	69.6	116.3	34.9			34.9	34.9	MS SOUND
TOTAL	560.4	1172.9			32.7		283.7	

1/ TOTAL EROSION INCLUDES ALL 1982 NRI EROSION AND ESTIMATED EROSION FROM BUILT-UP, FEDERAL LANDS, ROADS, ETC., NOT REPORTED IN 1982 NRI

SOURCE: 1982 NRI

## EROSION AND SEDIMENT FOR HYDROLOGIC SUBREGIONS 602/603 TENNESSEE

REACH	DRAINAGE AREA 1000 ACRES	EROSION 1/ 1000 TONS	-----SEDIMENT 1000 TONS-----					REMARKS
			FROM D.A.	BRT FWD	TRAPPED	PASSED	EXPORT	
NICKAJACK RES TRIBS	33.8	93.0	25.1			25.1	25.1	NICKAJACK RES
TENN @ GUNTERSVILLE RES	1053.0	2905.3	726.3		653.7	72.6		
UPPER ELK	0.3	1.2	0.5			0.5	0.5	TN
TENN @ WHEELER DAM	1867.0	8697.8	1652.6	72.6	1552.7	172.5		
TENN @ WILSON RES	468.3	2792.8	642.3	172.5	733.3	81.5		
PICKWICK TRIBS	555.3	3311.7	761.7	81.5		843.2	843.2	PICKWICK RES
BEAR CK UPPER LAKE	65.3	335.4	83.9		75.5	8.4		
BEAR CK LOWER LAKE	74.6	383.4	95.9	8.4	93.8	10.4		
BEAR CK/LTL BEAR LAKE	46.2	237.5	61.8		55.6	6.2		
BEAR CK/CEDAR CK LAKE	115.2	591.9	142.1		127.9	14.2		
BEAR CREEK	89.8	461.5	106.1	308.0		136.9	136.9	MS
TOTAL	4368.8	19811.5			3292.5		1005.7	

1/ TOTAL EROSION INCLUDES ALL 1982 NRI EROSION AND ESTIMATED EROSION FROM BUILT-UP, FEDERAL LANDS, ROADS, ETC., NOT REPORTED IN 1982 NRI

## APPENDIX D

COUNTY RESOURCE DATA -- 1982





## COUNTY RESOURCE DATA -- 1982

This section presents census-type information relating to the agriculture and forestry resources in each county. In addition, the adjusted 1982 NRI estimates of land use and other data related to erosion and conservation treatment are presented. The 1982 NRI land use data for each county has been adjusted based on other available information. Work groups at the county, regional and state level representing the Soil Conservation Service, Alabama Forestry Commission, and Alabama Cooperative Extension Service, participated in adjusting the data. The data was also reviewed at the state level by the Alabama Crop and Livestock Reporting Service (ACLRs)<sup>1/</sup>.

Data users should refer to the Appendix A discussion concerning the statistical reliability of the 1982 National Resources Inventory to evaluate the reliability of any of the NRI data at the county level. The reliability of composite NRI data for several adjacent counties should be significantly greater than that for a single county. The reader is reminded; however, that this inventory was designed to provide acceptably accurate data at the Major Land Resource Area level.

The flood plain land use data is based on broad mapping of the state's flood plains and measurement of the resulting land use maps. It should be the most reliable flood plain land use data currently available at the county level for the entire state. Estimates of flood damages to crops and pasture are based on extrapolation of damage data developed in comparable PL-566 watershed project areas.

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<sup>1/</sup> The adjusted 1982 NRI cropland acreage and the ACLRS's estimate of acreage of major crops harvested in 1982 are presented for each county. In a few counties, the total acreage of harvested crops is greater than the adjusted 1982 NRI cropland acreage. This is due to the difference in methodology used to develop the acreage estimates, including a difference in accounting for double-cropped acreage.

AUTAUGA COUNTY, ALABAMA  
1982 Resource Data

Autauga County's population is predominantly urban. Its nonfederal rural land area is distributed as follows: 18 percent cropland, 13 percent pastureland, 63 percent forest land, and 6 percent in minor uses. Soybeans and cotton are the principal crops grown. The county ranks 22nd in the state in the value of crop sales, 46th in livestock and poultry sales, and 40th in timber sales. The county is one of the leading counties in hog production and is an important county in peach production. The average sheet and rill erosion rate on cropland, 5.9 tons per acre per year, is 17 percent below the state average. Approximately 54 percent of the cropland needs conservation treatment.

	Population, 1960-1980 1/		
	1960	1970	1980
Rural	12,124	13,344	13,030
Urban	6,615	13,116	19,229
Total	18,739	24,460	32,259

	Major Crops 1982	Acres Harvested 1982 4/
Number of Farms, 1982 2/	453	Soybeans 27,200
Avg. Size of Farms, 1982 2/ (Ac.)	320	Cotton 12,200
Value of Sales, 1982: (Thou. Dollars)		Hay 4,300
Crops 2/	10,227	Wheat 4,100
Livestock and Poultry 2/	7,785	G. Sorghum 3,200
Timber Sold 3/	5,363	Corn 1,200

- 1/ U.S. Census of Population--Urban population consists of all persons living in places (incorporated or unincorporated) of 2,500 inhabitants or more.
- 2/ 1982 Census of Agriculture.
- 3/ Trees -- Alabama's No. 1 Money Crop in 1982, C. W. McKee, Alabama Cooperative Extension Service.
- 4/ Alabama Agricultural Statistics, 1982 Revised.

COUNTY NAME: Autauga

LAND USE, 1982

----- Nonfederal Rural Land -----										
Cropland	Pasture- land	Forest- land	Minor Uses	Total Nonfederal Rural Land	Urban & Built-up 1000 Acs.	Rural Trans- portation	Federal Land	Census Water	Small Water	Total Surface Area (Census)
64.3	48.9	231.2	20.1	364.5	6.6	6.4	1.7	4.2	2.9	386.3

Source: 1982 NRI, adjusted by inter-agency county and state workgroups.

SHEET AND RILL EROSION BY LAND USE, 1982  
RURAL NONFEDERAL LAND

	Area (1000 Acs.)	Average Erosion Rate (Tons/Acre/Year)	Total Erosion (Tons/Year)	Area Eroding At <= T	Area Eroding At > T -- 2T (1,000 Acres)	Area Eroding At > 2T
Cropland-All	64.3	5.9	377.8	36.8	16.2	11.3
Row Crops	43.8	7.0	305.2	20.1	14.4	9.2
Pastureland	48.9	0.6	30.4	47.4	.9	.7
Forest Land	231.2	.8	178.3	226.2	.9	4.1
Minor Uses	20.1	14.8	298.7	16.1	1.4	2.6
Total	364.5	2.4	885.2	326.5	19.4	18.7

Source: 1982 NRI, adjusted by SCS county personnel and state workgroup.

RURAL NONFEDERAL LAND NEEDING CONSERVATION TREATMENT BY LAND USE, 1982

	Cropland	Pastureland	Forest
----- 1,000 acres -----			
Area Needing Treatment			
For: Erosion Control	31.8	1.8	4.9
Other	2.8	17.9	136.7
Percent Adequately Protected	46	59	38
Percent Needing Treatment	54	41	61
Percent Not Feasible to Treat	0	0	1

Source: 1982 NRI, adjusted by SCS county personnel and state workgroup.

FLOOD PLAIN LAND USE & AGRICULTURAL FLOOD DAMAGES, 1982

County Area	Floodplain Type	Flood Plain Land Use Acres -----							Average Annual Flood Damages			Number of Sub-w/S In County
		Total	Cropland	Pastureland	Forestland	Urban	Other	Water	Total \$	Cropland \$	Pasture- land \$	
	Tributary	22,840	0	780	21,749	40	108	163	2,300	0	2,300	-
	Riverine	31,436	6,775	6,959	12,723	40	432	4,507	328,300	307,400	20,900	-
	Total	54,276	6,775	7,739	34,472	80	540	4,670	330,600	307,400	23,200	10

Source: Flood plain land use, USDA-SCS, Auburn, AL.



BALDWIN COUNTY, ALABAMA  
1982 Resource Data

Baldwin County's population is predominantly rural. Its nonfederal rural land area is distributed as follows: 19 percent cropland, 4 percent pastureland, 73 percent forest land, and 4 percent in minor uses. Soybeans, corn, and wheat are the principal crops grown. The county ranks 3rd in the state in the value of crop sales, 23rd in livestock and poultry sales, and 8th in timber sales. The county is one of the leading producers of pecans, Irish potatoes, and sweet potatoes. The average sheet and rill erosion rate on cropland, 5.4 tons per acre per year, is 24 percent below the state average. Approximately 60 percent of the cropland needs conservation treatment.

	Population, 1960-1980 1/		
	1960	1970	1980
Rural	36,129	43,567	49,502
Urban	12,959	15,815	29,054
Total	49,088	59,382	78,556

		Major Crops 1982	Acres Harvested 1982 4/
Number of Farms, 1982 2/	1,119	Soybeans	103,000
Avg. Size of Farms, 1982 2/ (Ac.)	200	Corn	44,000
Value of Sales, 1982: (Thou. Dollars)		Wheat	43,300
Crops 2/	30,509	Hay	6,000
Livestock and Poultry 2/	14,060	G. Sorghum	4,000
Timber Sold 3/	15,183	Cotton	250

- 1/ U.S. Census of Population--Urban population consists of all persons living in places (incorporated or unincorporated) of 2,500 inhabitants or more.
- 2/ 1982 Census of Agriculture.
- 3/ Trees -- Alabama's No. 1 Money Crop in 1982, C. W. McKee, Alabama Cooperative Extension Service.
- 4/ Alabama Agricultural Statistics, 1982 Revised.

COUNTY NAME: Baldwin

LAND USE, 1982

----- Nonfederal Rural Land -----										
Cropland	Pasture- land	Forest- land	Minor Uses	Total Nonfederal Rural Land	Urban & Built-up	Rural Trans- portation	Federal Land	Census Water	Small Water	Total Surface Area (Census)
					1000 Acs.					
182.0	38.0	694.3	35.2	949.5	31.6	23.2	3.7	58.2	9.3	1075.5

Source: 1982 NRI, adjusted by inter-agency county and state workgroups.

SHEET AND RILL EROSION BY LAND USE, 1982  
RURAL NONFEDERAL LAND

	Area (1000 Acs.)	Average Erosion Rate (Tons/Acre/Year)	Total Erosion (Tons/Year)	Area Eroding At <= T	Area Eroding At > T -- 2T (1,000 Acres)	Area Eroding At > 2T
Cropland-All	182.0	5.4	988.0	90.1	69.5	22.4
Row Crops	166.2	6.4	928.4 <sup>1/</sup>	65.8	77.4	23.0
Pastureland	38.0	.5	18.7	38.0	.0	.0
Forest Land	694.3	.4	301.0	681.4	8.2	4.7
Minor Uses	35.2	1.6	55.6	35.2	.0	.0
Total	949.5	1.8	1363.3	844.7	77.7	27.1

Source: 1982 NRI, adjusted by SCS county personnel and state workgroup.

<sup>1/</sup> Adjusted downward to reflect original relationship with erosion volume for all cropland.

RURAL NONFEDERAL LAND NEEDING CONSERVATION TREATMENT BY LAND USE, 1982

	Cropland	Pastureland	Forest
----- 1,000 acres -----			
Area Needing Treatment			
For: Erosion Control	101.5	0.0	3.2
Other	7.8	24.2	514.9
Percent Adequately Protected	40	36	24
Percent Needing Treatment	60	64	75
Percent Not Feasible to Treat	0	0	1

Source: 1982 NRI, adjusted by SCS county personnel and state workgroup.

FLOOD PLAIN LAND USE & AGRICULTURAL FLOOD DAMAGES, 1982

County Area	Floodplain Type	Flood Plain Land Use Acres -----							Average Annual Flood Damages			Number of Sub-W/S In County
		Total	Cropland	Pastureland	Forestland	Urban	Other	Water	Total \$	Cropland \$	Pasture- land \$	
	Tributary	146,321	37	38	118,446	6,639	130	21,031	1,400	1,300	100	-
	Riverine	298,804	0	5	136,295	1,730	0	160,774	100	0	100	-
	Total	445,435	37	43	254,741	8,369	130	181,805	1,500	1,300	200	25

Source: Flood plain land use, USDA-SCS, Auburn, AL.

BARBOUR COUNTY, ALABAMA  
1982 Resource Data

Barbour County's population is about equally distributed between rural and urban. Its nonfederal rural land area is distributed as follows: 17 percent cropland, 13 percent pastureland, 69 percent forest land, and 1 percent in minor uses. Peanuts, corn, and soybeans are the principal crops grown. The county ranks 15th in the state in the value of crop sales, 39th in livestock and poultry sales, and 17th in timber sales. The county is an important beef-producing county and one of the leading pecan producers. The average sheet and rill erosion rate on cropland, 6.9 tons per acre per year, is 3 percent below the state average. Approximately 60 percent of the cropland needs conservation treatment.

	Population, 1960-1980 <sup>1/</sup>		
	1960	1970	1980
Rural	16,351	13,441	12,659
Urban	8,349	9,102	12,097
Total	24,700	22,543	24,756

		Major Crops 1982	Acres Harvested 1982 <sup>4/</sup>
Number of Farms, 1982 <sup>2/</sup>	587	Peanuts	17,500
Avg. Size of Farms, 1982 <sup>2/</sup> (Ac.)	378	Corn	12,400
Value of Sales, 1982: (Thou. Dollars)		Soybeans	9,700
Crops <sup>2/</sup>	15,225	Hay	5,400
Livestock and Poultry <sup>2/</sup>	9,195	Cotton	3,930
Timber Sold <sup>3/</sup>	9,179	Wheat	3,600
		G. Sorghum	3,200

- <sup>1/</sup> U.S. Census of Population--Urban population consists of all persons living in places (incorporated or unincorporated) of 2,500 inhabitants or more.
- <sup>2/</sup> 1982 Census of Agriculture.
- <sup>3/</sup> Trees -- Alabama's No. 1 Money Crop in 1982, C. W. McKee, Alabama Cooperative Extension Service.
- <sup>4/</sup> Alabama Agricultural Statistics, 1982 Revised.



COUNTY NAME: Barbour

LAND USE, 1982

----- Nonfederal Rural Land -----										
Cropland	Pasture- land	Forest- land	Minor Uses	Total Nonfederal Rural Land	Urban & Built-up	Rural Trans- portation	Federal Land	Census Water	Small Water	Total Surface Area (Census)
					1000 Acs.					
94.2	70.7	369.3	4.2	538.4	8.6	8.4	4.2	12.9	6.1	578.6

Source: 1982 NRI, adjusted by inter-agency county and state workgroups.

SHEET AND RILL EROSION BY LAND USE, 1982  
RURAL NONFEDERAL LAND

	Area (1000 Acs.)	Average Erosion Rate (Tons/Acre/Year)	Total Erosion (Tons/Year)	Area Eroding At <= T	Area Eroding At > T -- 2T (1,000 Acres)	Area Eroding At > 2T
Cropland-All	94.2	6.9	646.0	44.3	30.0	19.9
Row Crops	70.7	7.4	520.3	29.9	24.9	15.9
Pastureland	70.7	.5	35.1	70.2	.2	.3
Forest Land	369.3	.4	154.7	361.8	4.0	3.4
Minor Uses	4.2	7.9	33.1	3.6	.3	.3
Total	538.4	1.6	868.9	479.9	34.5	23.9

Source: 1982 NRI, adjusted by SCS county personnel and state workgroup.

RURAL NONFEDERAL LAND NEEDING CONSERVATION TREATMENT BY LAND USE, 1982

	Cropland	Pastureland	Forest
----- 1,000 acres -----			
Area Needing Treatment			
For: Erosion Control	55.4	1.3	6.2
Other	1.0	27.1	171.8
Percent Adequately Protected	40	60	52
Percent Needing Treatment	60	40	48
Percent Not Feasible to Treat	0	0	0

Source: 1982 NRI, adjusted by SCS county personnel and state workgroup.

FLOOD PLAIN LAND USE & AGRICULTURAL FLOOD DAMAGES, 1982

County Area	Floodplain Type	Flood Plain Land Use Acres							Average Annual Flood Damages			Number of Sub-w/S In County
		Total	Cropland	Pastureland	Forestland	Urban	Other	Water	Total \$	Cropland \$	Pasture- land \$	
	Tributary	60,539	2,581	1,686	53,166	0	266	2,840	96,900	91,900	5,000	-
	Riverine	14,294	148	79	6,793	0	6	7,268	6,600	6,300	300	-
	Total	74,833	2,729	1,765	59,959	0	272	10,108	103,500	98,200	5,300	16

Source: Flood plain land use, USDA-SCS, Auburn, AL.

BIBB COUNTY, ALABAMA  
1982 Resource Data

Bibb County's population is predominantly rural. Its nonfederal rural land area is distributed as follows: 4 percent cropland, 10 percent pastureland, 83 percent forest land, and 3 percent in minor uses. Soybeans is the principal crop grown. The county ranks 59th in the state in the value of crop sales, 65th in livestock and poultry sales, and 10th in timber sales. The average sheet and rill erosion rate on cropland, 6.5 tons per acre per year, is 8 percent below the state average. Approximately 61 percent of the cropland needs conservation treatment.

	Population, 1960-1980 1/		
	1960	1970	1980
Rural	14,357	13,812	10,357
Urban	0	0	5,366
Total	14,357	13,812	15,723

	Major Crops 1982	Acres Harvested 1982 4/
Number of Farms, 1982 2/	Soybeans	24,200
Avg. Size of Farms, 1982 2/ (Ac.)	Hay	6,700
Value of Sales, 1982: (Thou. Dollars)	Wheat	4,600
Crops 2/	Cotton	520
Livestock and Poultry 2/		
Timber Sold 3/		

- 1/ U.S. Census of Population--Urban population consists of all persons living in places (incorporated or unincorporated) of 2,500 inhabitants or more.
- 2/ 1982 Census of Agriculture.
- 3/ Trees -- Alabama's No. 1 Money Crop in 1982, C. W. McKee, Alabama Cooperative Extension Service.
- 4/ Alabama Agricultural Statistics, 1982 Revised.

COUNTY NAME: Bibb

LAND USE, 1982

----- Nonfederal Rural Land -----										
Cropland	Pasture- land	Forest- land	Minor Uses	Total Nonfederal Rural Land	Urban & Built-up	Rural Trans- portation	Federal Land	Census Water	Small Water	Total Surface Area (Census)
					1000 Acs.					
13.7	32.7	274.9	8.3	329.6	3.6	3.8	60.0	0.1	2.8	399.9

Source: 1982 NRI, adjusted by inter-agency county and state workgroups.

SHEET AND RILL EROSION BY LAND USE, 1982  
RURAL NONFEDERAL LAND

	Area (1000 Acs.)	Average Erosion Rate (Tons/Acre/Year)	Total Erosion (Tons/Year)	Area Eroding At <= T	Area Eroding At > T -- 2T	Area Eroding At > 2T
Cropland-All	13.7	6.5	89.3	6.6	3.3	3.8
Row Crops	10.1	7.9	80.4	3.4	3.0	3.7
Pastureland	32.7	.5	17.8	31.9	.5	.3
Forest Land	274.9	.8	217.7	267.6	2.2	5.1
Minor Uses	8.3	110.4	916.3	5.7	.5	2.1
Total	329.6	3.8	1,241.1	311.8	6.5	11.3

Source: 1982 NRI, adjusted by SCS county personnel and state workgroup.

RURAL NONFEDERAL LAND NEEDING CONSERVATION TREATMENT BY LAND USE, 1982

	Cropland	Pastureland	Forest
----- 1,000 acres -----			
Area Needing Treatment			
For: Erosion Control	7.9	1.1	4.4
Other	0.5	10.5	178.4
Percent Adequately Protected	39	59	32
Percent Needing Treatment	61	41	67
Percent Not Feasible to Treat	0	0	1

Source: 1982 NRI, adjusted by SCS county personnel and state workgroup.

FLOOD PLAIN LAND USE & AGRICULTURAL FLOOD DAMAGES, 1982

County Area	Floodplain Type	Flood Plain Land Use Acres							Average Annual Flood Damages			Number of Sub-W/S In County
		Total	Cropland	Pastureland	Forestland	Urban	Other	Water	Total \$	Cropland \$	Pasture- land \$	
	Tributary	23,527	3,139	3,023	17,116	60	66	123	66,100	57,000	9,100	-
	Riverine	20,179	3,278	2,438	12,789	414	98	1,162	98,700	91,400	7,300	-
	Total	43,706	6,417	5,461	29,905	474	164	1,285	164,800	148,400	16,400	15

Source: Flood plain land use, USDA-SCS, Auburn, AL.



BLOUNT COUNTY, ALABAMA  
1982 Resource Data

Blount County's population is predominantly rural. Its nonfederal rural land area is distributed as follows: 15 percent cropland, 20 percent pastureland, 62 percent forest land, and 3 percent in minor uses. Soybeans, hay, and wheat are the principal crops grown. The county ranks 32nd in the state in the value of crop sales, 4th in livestock and poultry sales, and 53rd in timber sales. It is one of the leading counties in the production of peaches, tomatoes and eggs and it is important in broiler and milk production. The average sheet and rill erosion rate on cropland, 8.1 tons per acre per year, is 14 percent above the state average. Approximately 78 percent of the cropland needs conservation treatment.

	Population, 1960-1980 1/		
	1960	1970	1980
Rural	21,301	22,463	31,635
Urban	4,148	4,390	4,824
Total	25,449	26,853	36,459

		Major Crops 1982	Acres Harvested 1982 4/
Number of Farms, 1982 2/	1,338	Soybeans	28,900
Avg. Size of Farms, 1982 2/ (Ac.)	122	Hay	17,800
Value of Sales, 1982: (Thou. Dollars)		Wheat	11,200
Crops 2/	6,610	Corn	2,000
Livestock and Poultry 2/	44,610	Cotton	450
Timber Sold 3/	2,684		

- 1/ U.S. Census of Population--Urban population consists of all persons living in places (incorporated or unincorporated) of 2,500 inhabitants or more.  
2/ 1982 Census of Agriculture.  
3/ Trees -- Alabama's No. 1 Money Crop in 1982, C. W. McKee, Alabama Cooperative Extension Service.  
4/ Alabama Agricultural Statistics, 1982 Revised.

COUNTY NAME: Blount

LAND USE, 1982

----- Nonfederal Rural Land -----										
Cropland	Pasture- land	Forest- land	Minor Uses	Total Nonfederal Rural Land	Urban & Built-up	Rural Trans- portation	Federal Land	Census Water	Small Water	Total Surface Area (Census)
					1000 Acs.					
56.6	75.8	239.1	12.8	384.3	12.4	10.1	0.0	3.3	4.8	414.9

Source: 1982 NRI, adjusted by inter-agency county and state workgroups.

SHEET AND RILL EROSION BY LAND USE, 1982  
RURAL NONFEDERAL LAND

	Area (1000 Acs.)	Average Erosion Rate (Tons/Acre/Year)	Total Erosion (Tons/Year)	Area Eroding At <= T	Area Eroding At > T -- 2T	Area Eroding At > 2T
Cropland-All	56.6	8.1	458.3	15.5	13.3	27.8
Row Crops	40.7	9.3	379.1	7.3	10.3	23.1
Pastureland	75.8	.7	50.1	72.3	1.9	1.5
Forest Land	239.1	.7	166.1	215.3	19.8	3.8
Minor Uses	12.8	190.2	2,435.1	7.6	.6	4.6
Total	384.3	8.1	3,109.6	310.7	35.6	37.7

Source: 1982 NRI, adjusted by SCS county personnel and state workgroup.

RURAL NONFEDERAL LAND NEEDING CONSERVATION TREATMENT BY LAND USE, 1982

	Cropland	Pastureland	Forest
----- 1,000 acres -----			
Area Needing Treatment			
For: Erosion Control	43.2	0.4	1.4
Other	0.9	36.4	175.6
Percent Adequately Protected	22	51	23
Percent Needing Treatment	78	49	74
Percent Not Feasible to Treat	0	0	3

Source: 1982 NRI, adjusted by SCS county personnel and state workgroup.

FLOOD PLAIN LAND USE & AGRICULTURAL FLOOD DAMAGES, 1982

County Area	Floodplain Type	Flood Plain Land Use Acres -----							Average Annual Flood Damages			Number of Sub-W/S In County
		Total	Cropland	Pastureland	Forestland	Urban	Other	Water	Total \$	Cropland \$	Pasture- land \$	
	Tributary	13,750	747	4,230	6,469	91	166	2,047	35,200	22,500	12,700	-
	Riverine	6,561	249	1,150	5,157	0	5	0	10,400	6,900	3,500	-
	Total	20,311	996	5,380	11,626	91	171	2,047	45,600	29,400	16,200	17

Source: Flood plain land use, USDA-SCS, Auburn, AL.

BULLOCK COUNTY, ALABAMA  
1982 Resource Data

Bullock County's population is predominantly rural. Its nonfederal rural land area is distributed as follows: 19 percent cropland, 18 percent pastureland, 62 percent forest land, and 1 percent in minor uses. Soybeans, wheat and hay are the principal crops grown. The county ranks 20th in the state in the value of crop sales, 54th in livestock and poultry sales, and 34th in timber sales. It is one of the leading producers of pecans. The average sheet and rill erosion rate on cropland, 6.9 tons per acre per year, is 3 percent below the state average. Approximately 65 percent of the cropland needs conservation treatment.

	Population, 1960-1980 1/		
	1960	1970	1980
Rural	9,760	7,500	6,165
Urban	3,702	4,324	4,431
Total	13,462	11,824	10,596

		Major Crops 1982	Acres Harvested 1982 4/
Number of Farms, 1982 2/	342	Soybeans	10,700
Avg. Size of Farms, 1982 2/ (Ac.)	542	Wheat	5,700
Value of Sales, 1982: (Thou. Dollars)		Hay	4,700
Crops 2/	11,026	Corn	2,600
Livestock and Poultry 2/	4,617	Peanuts	1,400
Timber Sold 3/	6,001	Cotton	300

- 1/ U.S. Census of Population--Urban population consists of all persons living in places (incorporated or unincorporated) of 2,500 inhabitants or more.
- 2/ 1982 Census of Agriculture.
- 3/ Trees -- Alabama's No. 1 Money Crop in 1982, C. W. McKee, Alabama Cooperative Extension Service.
- 4/ Alabama Agricultural Statistics, 1982 Revised.



----- Nonfederal Rural Land -----										
Cropland	Pasture- land	Forest- land	Minor Uses	Total Nonfederal Rural Land	Urban & Built-up 1000 Acs.	Rural Trans- portation	Federal Land	Census Water	Small Water	Total Surface Area (Census)
74.8	69.4	240.8	4.4	389.4	2.3	5.3	0.0	1.2	2.8	401.0

Source: 1982 NRI, adjusted by inter-agency county and state workgroups.

SHEET AND RILL EROSION BY LAND USE, 1982  
RURAL NONFEDERAL LAND

	Area (1000 Acs.)	Average Erosion Rate (Tons/Acre/Year)	Total Erosion (Tons/Year)	Area Eroding At <= T	Area Eroding At > T -- 2T (1,000 Acres)	Area Eroding At > 2T
Cropland-All	74.8	6.9	517.3	32.9	23.4	18.5
Row Crops	54.2	7.6	409.6	20.3	19.0	14.9
Pastureland	69.4	.7	50.0	66.3	2.2	.9
Forest Land	240.8	.5	123.4	236.6	1.8	2.4
Minor Uses	4.4	8.1	35.6	3.8	.3	.3
Total	389.4	1.9	726.3	339.6	27.7	22.1

Source: 1982 NRI, adjusted by SCS county personnel and state workgroup.

## RURAL NONFEDERAL LAND NEEDING CONSERVATION TREATMENT BY LAND USE, 1982

	Cropland	Pastureland	Forest
----- 1,000 acres -----			
Area Needing Treatment			
For: Erosion Control	47.2	4.6	3.9
Other	1.5	31.9	101.0
Percent Adequately Protected	35	47	55
Percent Needing Treatment	65	53	44
Percent Not Feasible to Treat	0	0	1

Source: 1982 NRI, adjusted by SCS county personnel and state workgroup.

## FLOOD PLAIN LAND USE &amp; AGRICULTURAL FLOOD DAMAGES, 1982

County Area	Floodplain Type	Flood Plain Land Use Acres -----							Average Annual Flood Damages			Number of Sub-W/S In County
		Total	Cropland	Pastureland	Forestland	Urban	Other	Water	Total \$	Cropland \$	Pasture- land \$	
	Tributary	48,257	3,554	6,579	35,492	0	2,602	30	118,200	98,500	19,700	-
	Riverine	7,462	35	745	6,682	0	0	0	3,200	1,000	2,200	-
	Total	55,719	3,589	7,324	42,174	0	2,602	30	121,400	99,500	21,900	11

Source: Flood plain land use, USDA-SCS, Auburn, AL.

BUTLER COUNTY, ALABAMA  
1982 Resource Data

Butler County's population is predominantly rural. Its nonfederal rural land area is distributed as follows: 11 percent cropland, 9 percent pastureland, 79 percent forest land, and 1 percent in minor uses. Soybeans is the principal crop grown. The county ranks 42nd in the state in the value of crop sales, 28th in livestock and poultry sales, and 9th in timber sales. The average sheet and rill erosion rate on cropland, 6.9 tons per acre per year, is 3 percent below the state average. Approximately 60 percent of the cropland needs conservation treatment.

	Population, 1960-1980 1/		
	1960	1970	1980
Rural	17,659	13,974	13,873
Urban	6,901	8,033	7,807
Total	24,560	22,007	21,680

		Major Crops 1982	Acres Harvested 1982 4/
Number of Farms, 1982 2/	593	Soybeans	14,800
Avg. Size of Farms, 1982 2/ (Ac.)	210	Hay	7,300
Value of Sales, 1982: (Thou. Dollars)		Wheat	6,300
Crops 2/	4,289	Corn	5,500
Livestock and Poultry 2/	12,653	Peanuts	1,800
Timber Sold 3/	15,027	G. Sorghum	1,800
		Cotton	480

- 1/ U.S. Census of Population--Urban population consists of all persons living in places (incorporated or unincorporated) of 2,500 inhabitants or more.  
2/ 1982 Census of Agriculture.  
3/ Trees -- Alabama's No. 1 Money Crop in 1982, C. W. McKee, Alabama Cooperative Extension Service.  
4/ Alabama Agricultural Statistics, 1982 Revised.

COUNTY NAME: Butler

LAND USE, 1982

----- Nonfederal Rural Land -----										
Cropland	Pasture- land	Forest- land	Minor Uses	Total Nonfederal Rural Land	Urban & Built-up 1000 Acs.	Rural Trans- portation	Federal Land	Census Water	Small Water	Total Surface Area (Census)
51.3	46.0	378.1	5.5	480.9	3.3	9.9	0.0	0.0	4.6	498.7

Source: 1982 NRI, adjusted by inter-agency county and state workgroups.

SHEET AND RILL EROSION BY LAND USE, 1982  
RURAL NONFEDERAL LAND

	Area (1000 Acs.)	Average Erosion Rate (Tons/Acre/Year)	Total Erosion (Tons/Year)	Area Eroding At <= T	Area Eroding At > T -- 2T (1,000 Acres)	Area Eroding At > 2T
Cropland-All	51.3	6.9	354.2	23.9	16.3	11.1
Row Crops	32.3	7.4	237.7	13.7	11.4	7.3
Pastureland	46.0	.5	24.2	45.5	.3	.2
Forest Land	378.1	.4	160.2	370.5	4.1	3.5
Minor Uses	5.5	7.9	43.3	4.7	.4	.4
Total	480.9	1.2	581.9	444.6	21.1	15.2

Source: 1982 NRI, adjusted by SCS county personnel and state workgroup.

RURAL NONFEDERAL LAND NEEDING CONSERVATION TREATMENT BY LAND USE, 1982

	Cropland	Pastureland	Forest
----- 1,000 acres -----			
Area Needing Treatment For: Erosion Control	30.5	1.1	6.4
Other	.6	18.1	175.2
Percent Adequately Protected	40	58	52
Percent Needing Treatment	60	42	48
Percent Not Feasible to Treat	0	0	0

Source: 1982 NRI, adjusted by SCS county personnel and state workgroup.

FLOOD PLAIN LAND USE & AGRICULTURAL FLOOD DAMAGES, 1982

County Area	Floodplain Type	Flood Plain Land Use Acres -----							Average Annual Flood Damages			Number of Sub-w/S In County
		Total	Cropland	Pastureland	Forestland	Urban	Other	Water	Total \$	Cropland \$	Pasture- land \$	
	Tributary	80,375	0	1,147	79,228	0	0	0	3,500	0	3,500	-
	Riverine	685	0	0	685	0	0	0	0	0	0	-
	Total	81,060	0	1,147	79,913	0	0	0	3,500	0	3,500	9

Source: Flood plain land use, USDA-SCS, Auburn, AL.



CALHOUN COUNTY, ALABAMA  
1982 Resource Data

Calhoun County's population is predominantly urban. Its nonfederal rural land area is distributed as follows: 18 percent cropland, 7 percent pastureland, 72 percent forest land, and 3 percent in minor uses. Soybeans, wheat, and hay are the principal crops grown. The county ranks 47nd in the state in the value of crop sales, 22nd in livestock and poultry sales, and 41st in timber sales. The average sheet and rill erosion rate on cropland, 7.8 tons per acre per year, is 10 percent above the state average. Approximately 71 percent of the cropland needs conservation treatment.

	Population, 1960-1980 1/		
	1960	1970	1980
Rural	42,666	31,463	29,302
Urban	53,212	71,629	90,459
Total	95,878	103,092	119,761

		Major Crops 1982	Acres Harvested 1982 4/
Number of Farms, 1982 2/	733	Soybeans	20,500
Avg. Size of Farms, 1982 2/ (Ac.)	127	Wheat	12,100
Value of Sales, 1982: (Thou.Dollars)		Hay	8,300
Crops 2/	3,784	Corn	1,600
Livestock and Poultry 2/	14,758	Cotton	500
Timber Sold 3/	4,831		

- 1/ U.S. Census of Population--Urban population consists of all persons living in places (incorporated or unincorporated) of 2,500 inhabitants or more.
- 2/ 1982 Census of Agriculture.
- 3/ Trees -- Alabama's No. 1 Money Crop in 1982, C. W. McKee, Alabama Cooperative Extension Service.
- 4/ Alabama Agricultural Statistics, 1982 Revised.

COUNTY NAME: Calhoun

LAND USE, 1982

----- Nonfederal Rural Land -----										
Cropland	Pasture- land	Forest- land	Minor Uses	Total Nonfederal Rural Land	Urban & Built-up	Rural Trans- portation	Federal Land	Census Water	Small Water	Total Surface Area (Census)
					1000 Acs.					
49.7	20.8	199.4	8.0	277.9	19.4	11.1	80.5	1.1	2.1	392.1

Source: 1982 NRI, adjusted by inter-agency county and state workgroups.

SHEET AND RILL EROSION BY LAND USE, 1982  
RURAL NONFEDERAL LAND

	Area (1000 Acs.)	Average Erosion Rate (Tons/Acre/Year)	Total Erosion (Tons/Year)	Area Eroding At <= T	Area Eroding At > T -- 2T (1,000 Acres)	Area Eroding At > 2T
Cropland-All	49.7	7.8	389.6	19.4	14.3	16.0
Row Crops	44.5	8.5	377.6	14.6	14.2	15.7
Pastureland	20.8	.6	12.6	20.5	.1	.2
Forest Land	199.4	.3	50.7	196.3	2.5	.6
Minor Uses	8.0	12.8	102.6	5.9	.1	2.0
Total	277.9	2.0	555.5	242.1	17.0	18.8

Source: 1982 NRI, adjusted by SCS county personnel and state workgroup.

RURAL NONFEDERAL LAND NEEDING CONSERVATION TREATMENT BY LAND USE, 1982

	Cropland	Pastureland	Forest
----- 1,000 acres -----			
Area Needing Treatment			
For: Erosion Control	32.5	0.1	0.8
Other	2.9	12.2	126.0
Percent Adequately Protected	29	52	31
Percent Needing Treatment	71	48	65
Percent Not Feasible to Treat	0	0	4

Source: 1982 NRI, adjusted by SCS county personnel and state workgroup.

FLOOD PLAIN LAND USE & AGRICULTURAL FLOOD DAMAGES, 1982

County Area	Floodplain Type	Flood Plain Land Use Acres -----							Average Annual Flood Damages			Number of Sub-W/S In County
		Total	Cropland	Pastureland	Forestland	Urban	Other	Water	Total \$	Cropland \$	Pasture- land \$	
	Tributary	34,072	6,185	5,139	20,963	937	204	644	192,900	177,500	15,400	-
	Riverine	2,876	391	48	656	12	84	1,685	11,100	10,900	200	-
	Total	36,948	6,576	5,187	21,619	949	288	2,329	204,000	188,400	15,600	14

Source: Flood plain land use, USDA-SCS, Auburn, AL.

CHAMBERS COUNTY, ALABAMA  
1982 Resource Data

Chambers County's population is about equally distributed between rural and urban. Its nonfederal rural land area is distributed as follows: 3 percent cropland, 15 percent pastureland, 81 percent forest land, and 1 percent in minor uses. Hay is the principal crop grown. The county ranks 61st in the state in the value of crop sales, 51st in livestock and poultry sales, and 30th in timber sales. The average sheet and rill erosion rate on cropland, 5.0 tons per acre per year, is 30 percent below the state average. Approximately 64 percent of the cropland needs conservation treatment.

	Population, 1960-1980 1/		
	<u>1960</u>	<u>1970</u>	<u>1980</u>
Rural	21,902	20,464	19,131
Urban	15,926	15,892	20,060
Total	37,828	36,356	39,191

		<u>Major Crops 1982</u>	<u>Acres Harvested 1982 4/</u>
Number of Farms, 1982 2/	409	Hay	16,800
Avg. Size of Farms, 1982 2/ (Ac.)	296	Wheat	2,600
Value of Sales, 1982: (Thou. Dollars)		G. Sorghum	2,500
Crops 2/	582	Soybeans	900
Livestock and Poultry 2/	5,770	Cotton	400
Timber Sold 3/	6,704		

- 1/ U.S. Census of Population--Urban population consists of all persons living in places (incorporated or unincorporated) of 2,500 inhabitants or more.  
2/ 1982 Census of Agriculture.  
3/ Trees -- Alabama's No. 1 Money Crop in 1982, C. W. McKee, Alabama Cooperative Extension Service.  
4/ Alabama Agricultural Statistics, 1982 Revised.



----- Nonfederal Rural Land -----										
Cropland	Pasture- land	Forest- land	Minor Uses	Total Nonfederal Rural Land	Urban & Built-up	Rural Trans- portation	Federal Land	Census Water	Small Water	Total Surface Area (Census)
					1000 Acs.					
12.6	52.3	294.9	2.9	362.7	9.5	4.3	3.3	2.9	3.4	386.1

Source: 1982 NRI, adjusted by inter-agency county and state workgroups.

SHEET AND RILL EROSION BY LAND USE, 1982  
RURAL NONFEDERAL LAND

	Area (1000 Acs.)	Average Erosion Rate (Tons/Acre/Year)	Total Erosion (Tons/Year)	Area Eroding At <= T	Area Eroding At > T -- 2T	Area Eroding At > 2T
Cropland-All	12.6	5.0	63.5	7.2	3.0	2.4
Row Crops	5.0	7.3	36.4	2.0	1.6	1.4
Pastureland	52.3	.6	30.1	51.6	.2	.5
Forest Land	294.9	.5	145.2	286.7	3.5	4.7
Minor Uses	2.9	1.6	4.5	2.8	0.0	.1
Total	362.7	0.7	243.3	348.3	6.7	7.7

Source: 1982 NRI, adjusted by SCS county personnel and state workgroup.

## RURAL NONFEDERAL LAND NEEDING CONSERVATION TREATMENT BY LAND USE, 1982

	Cropland	Pastureland	Forest
----- 1,000 acres -----			
Area Needing Treatment			
For: Erosion Control	7.2	0.7	1.1
Other	0.9	34.7	188.5
Percent Adequately Protected	36	32	35
Percent Needing Treatment	64	68	64
Percent Not Feasible to Treat	0	0	1

Source: 1982 NRI, adjusted by SCS county personnel and state workgroup.

## FLOOD PLAIN LAND USE &amp; AGRICULTURAL FLOOD DAMAGES, 1982

County Area	Floodplain Type	Flood Plain Land Use Acres							Average Annual Flood Damages			Number of Sub-W/S In County
		Total	Cropland	Pastureland	Forestland	Urban	Other	Water	Total \$	Cropland \$	Pasture- land \$	
	Tributary	32,772	397	2,175	29,849	87	0	264	21,200	14,700	6,500	-
	Riverine	7,795	140	391	4,136	8	0	3,120	6,400	5,200	1,200	-
	Total	40,567	537	2,566	33,985	95	0	3,384	27,600	19,900	7,700	17

Source: Flood plain land use, USDA-SCS, Auburn, AL.

CHEROKEE COUNTY, ALABAMA  
1982 Resource Data

Cherokee County's population is predominantly rural. Its nonfederal rural land area is distributed as follows: 21 percent cropland, 10 percent pastureland, 66 percent forest land, and 3 percent in minor uses. Soybeans is the principal crop grown. The county ranks 13th in the state in the value of crop sales, 37th in livestock and poultry sales, and 48th in timber sales. The average sheet and rill erosion rate on cropland, 7.9 tons per acre per year, is 11 percent above the state average. Approximately 72 percent of the cropland needs conservation treatment.

	Population, 1960-1980 1/		
	1960	1970	1980
Rural	16,303	15,606	18,760
Urban	0	0	0
Total	16,303	15,606	18,760

		Major Crops 1982	Acres Harvested 1982 4/
Number of Farms, 1982 2/	588	Soybeans	51,300
Avg. Size of Farms, 1982 2/ (Ac.)	244	Wheat	19,100
Value of Sales, 1982: (Thou. Dollars)		Cotton	9,300
Crops 2/	15,686	Hay	6,600
Livestock and Poultry 2/	9,350	Corn	2,900
Timber Sold 3/	3,465	G. Sorghum	2,400

- 1/ U.S. Census of Population--Urban population consists of all persons living in places (incorporated or unincorporated) of 2,500 inhabitants or more.  
2/ 1982 Census of Agriculture.  
3/ Trees -- Alabama's No. 1 Money Crop in 1982, C. W. McKee, Alabama Cooperative Extension Service.  
4/ Alabama Agricultural Statistics, 1982 Revised.

COUNTY NAME: Cherokee

LAND USE, 1982

----- Nonfederal Rural Land -----										
Cropland	Pasture- land	Forest- land	Miner Uses	Total Nonfederal Rural Land	Urban & Built-up 1000 Acs.	Rural Trans- portation	Federal Land	Census Water	Small Water	Total Surface Area (Census)
69.9	35.3	223.4	9.0	337.6	6.5	7.6	0.0	30.1	2.3	384.1

Source: 1982 NRI, adjusted by inter-agency county and state workgroups.

SHEET AND RILL EROSION BY LAND USE, 1982  
RURAL NONFEDERAL LAND

	Area (1000 Acs.)	Average Erosion Rate (Tons/Acre/Year)	Total Erosion (Tons/Year)	Area Eroding At <= T	Area Eroding At > T -- 2T (1,000 Acres)	Area Eroding At > 2T
Cropland-All	69.9	7.9	549.8	26.4	19.8	23.7
Row Crops	62.3	8.6	533.5	19.5	19.5	23.2
Pastureland	35.3	.5	17.8	34.8	.2	.3
Forest Land	223.4	.4	79.1	219.1	3.0	1.3
Minor Uses	9.0	51.0	458.9	6.4	.2	2.4
Total	337.6	3.3	1,105.6	286.7	23.2	27.7

Source: 1982 NRI, adjusted by SCS county personnel and state workgroup.

RURAL NONFEDERAL LAND NEEDING CONSERVATION TREATMENT BY LAND USE, 1982

	Cropland	Pastureland	Forest
----- 1,000 acres -----			
Area Needing Treatment			
For: Erosion Control	46.5	0.1	1.0
Other	3.7	16.7	148.9
Percent Adequately Protected	28	52	29
Percent Needing Treatment	72	48	67
Percent Not Feasible to Treat	0	0	4

Source: 1982 NRI, adjusted by SCS county personnel and state workgroup.

FLOOD PLAIN LAND USE & AGRICULTURAL FLOOD DAMAGES, 1982

County Area	Floodplain Type	Flood Plain Land Use Acres -----							Average Annual Flood Damages			Number of Sub-w/S In County
		Total	Cropland	Pastureland	Forestland	Urban	Other	Water	Total \$	Cropland \$	Pasture- land \$	
	Tributary	12,594	2,672	1,132	8,354	13	55	368	92,300	88,900	3,400	-
	Riverine	53,526	8,136	442	14,334	54	341	30,219	270,400	269,100	1,300	-
	Total	66,120	10,808	1,574	22,688	67	396	30,587	362,700	358,000	4,700	18

Source: Flood plain land use, USDA-SCS, Auburn, AL.



CHILTON COUNTY, ALABAMA  
1982 Resource Data

Chilton County's population is predominantly rural. Its nonfederal rural land area is distributed as follows: 8 percent cropland, 15 percent pastureland, 74 percent forest land, and 3 percent in minor uses. Peaches and soybeans are the principal crops grown. The county ranks 33rd in the state in the value of crop sales, 57th in livestock and poultry sales, and 18th in timber sales. It is the leading county in peach production. The average sheet and rill erosion rate on cropland, 6.0 tons per acre per year, is 15 percent below the state average. Approximately 56 percent of the cropland needs conservation treatment.

	Population, 1960-1980 1/		
	1960	1970	1980
Rural	20,015	19,312	24,780
Urban	5,678	5,868	5,832
Total	25,693	25,180	30,612

		Major Crops 1982	Acres Harvested 1982 4/
Number of Farms, 1982 2/	793	Soybeans	7,300
Avg. Size of Farms, 1982 2/ (Ac.)	145	Hay	4,400
Value of Sales, 1982: (Thou.Dollars)		Corn	3,300
Crops 2/	6,218	Cotton	3,170
Livestock and Poultry 2/	4,081	Wheat	3,100
Timber Sold 3/	8,542		

- 1/ U.S. Census of Population--Urban population consists of all persons living in places (incorporated or unincorporated) of 2,500 inhabitants or more.  
2/ 1982 Census of Agriculture.  
3/ Trees -- Alabama's No. 1 Money Crop in 1982, C. W. McKee, Alabama Cooperative Extension Service.  
4/ Alabama Agricultural Statistics, 1982 Revised.

COUNTY NAME: Chilton

LAND USE, 1982

----- Nonfederal Rural Land -----										
Cropland	Pasture- land	Forest- land	Minor Uses	Total Nonfederal Rural Land	Urban & Built-up 1000 Acs.	Rural Trans- portation	Federal Land	Census Water	Small Water	Total Surface Area (Census)
32.4	59.0	298.4	10.9	400.7	8.4	10.5	22.5	3.6	2.4	448.1

Source: 1982 NRI, adjusted by inter-agency county and state workgroups.

SHEET AND RILL EROSION BY LAND USE, 1982  
RURAL NONFEDERAL LAND

	Area (1000 Acs.)	Average Erosion Rate (Tons/Acre/Year)	Total Erosion (Tons/Year)	Area Eroding At <= T	Area Eroding At > T -- 2T (1,000 Acres)	Area Eroding At > 2T
Cropland-All	32.4	6.0	193.5	18.1	8.2	6.1
Row Crops	21.1	7.1	147.9	9.5	6.9	4.6
Pastureland	59.0	.7	42.3	57.0	1.1	.9
Forest Land	298.4	.7	190.7	291.1	2.3	5.0
Minor Uses	10.9	10.6	115.3	9.3	.5	1.1
Total	400.7	1.3	541.8	375.5	12.1	13.1

Source: 1982 NRI, adjusted by SCS county personnel and state workgroup.

RURAL NONFEDERAL LAND NEEDING CONSERVATION TREATMENT BY LAND USE, 1982

	Cropland	Pastureland	Forest
----- 1,000 acres -----			
Area Needing Treatment			
For: Erosion Control	16.6	2.3	3.9
Other	1.5	29.0	183.0
Percent Adequately Protected	44	54	36
Percent Needing Treatment	56	46	63
Percent Not Feasible to Treat	0	0	1

Source: 1982 NRI, adjusted by SCS county personnel and state workgroup.

FLOOD PLAIN LAND USE & AGRICULTURAL FLOOD DAMAGES, 1982

County Area	Floodplain Type	Flood Plain Land Use Acres -----							Average Annual Flood Damages			Number of Sub-W/S In County
		Total	Cropland	Pastureland	Forestland	Urban	Other	Water	Total \$	Cropland \$	Pasture- land \$	
	Tributary	35,680	987	2,666	31,161	348	518	0	33,700	25,700	8,000	-
	Riverine	5,147	0	12	1,522	0	0	3,613	100	0	100	-
	Total	40,827	987	2,678	32,683	348	518	3,613	33,800	25,700	8,100	13

Source: Flood plain land use, USDA-SCS, Auburn, AL.

CHOCTAW COUNTY, ALABAMA  
1982 Resource Data

Choctaw County's population is predominantly rural. Its nonfederal rural land area is distributed as follows: 4 percent cropland, 5 percent pastureland, 90 percent forest land, and 1 percent in minor uses. Hay is the principal crop grown. The county ranks 60th in the state in the value of crop sales, 61st in livestock and poultry sales, and 4th in timber sales. The average sheet and rill erosion rate on cropland, 5.4 tons per acre per year, is 24 percent below the state average. Approximately 60 percent of the cropland needs conservation treatment.

	Population, 1960-1980 1/		
	1960	1970	1980
Rural	17,870	16,589	16,839
Urban	0	0	0
Total	17,870	16,589	16,839

	Major Crops 1982	Acres Harvested 1982 4/
Number of Farms, 1982 2/	404	
Avg. Size of Farms, 1982 2/ (Ac.)	266	
Value of Sales, 1982: (Thou. Dollars)		
Crops 2/	672	
Livestock and Poultry 2/	2,915	
Timber Sold 3/	19,623	
	Hay	6,800
	Soybeans	3,100
	Corn	1,700
	Cotton	820

- 1/ U.S. Census of Population--Urban population consists of all persons living in places (incorporated or unincorporated) of 2,500 inhabitants or more.  
2/ 1982 Census of Agriculture.  
3/ Trees -- Alabama's No. 1 Money Crop in 1982, C. W. McKee, Alabama Cooperative Extension Service.  
4/ Alabama Agricultural Statistics, 1982 Revised.



COUNTY NAME: Choctaw

LAND USE, 1982

----- Nonfederal Rural Land -----										
Cropland	Pasture- land	Forest- land	Minor Uses	Total Nonfederal Rural Land	Urban & Built-up	Rural Trans- portation	Federal Land	Census Water	Small Water	Total Surface Area (Census)
----- 1000 Acs. -----										
20.2	27.1	500.6	6.0	553.9	3.9	12.2	5.0	7.4	7.0	589.4

Source: 1982 NRI, adjusted by inter-agency county and state workgroups.

SHEET AND RILL EROSION BY LAND USE, 1982  
RURAL NONFEDERAL LAND

	Area (1000 Acs.)	Average Erosion Rate (Tons/Acre/Year)	Total Erosion (Tons/Year)	Area Eroding At <= T	Area Eroding At > T -- 2T (1,000 Acres)	Area Eroding At > 2T
Cropland-All	20.2	5.4	109.7	10.0	7.7	2.5
Row Crops	11.0	6.4	70.4	4.4	5.1	1.5
Pastureland	27.1	.5	14.3	25.1	1.7	.3
Forest Land	500.6	.6	222.1	485.1	4.6	10.9
Minor Uses	6.0	1.6	9.3	4.6	.1	1.4
Total	553.9	.6	355.5	524.8	14.1	15.1

Source: 1982 NRI, adjusted by SCS county personnel and state workgroup.

RURAL NONFEDERAL LAND NEEDING CONSERVATION TREATMENT BY LAND USE, 1982

	Cropland	Pastureland	Forest
----- 1,000 acres -----			
Area Needing Treatment			
For: Erosion Control	11.3	.3	3.1
Other	.9	17.0	373.1
Percent Adequately Protected	40	36	24
Percent Needing Treatment	60	64	75
Percent Not Feasible to Treat	0	0	1

Source: 1982 NRI, adjusted by SCS county personnel and state workgroup.

FLOOD PLAIN LAND USE & AGRICULTURAL FLOOD DAMAGES, 1982

County Area	Floodplain Type	Flood Plain Land Use Acres -----							Average Annual Flood Damages			Number of Sub-W/S In County
		Total	Cropland	Pastureland	Forestland	Urban	Other	Water	Total \$	Cropland \$	Pasture- land \$	
	Tributary	72,643	2,137	6,036	63,975	16	294	185	61,500	43,300	18,200	-
	Riverine	40,224	1,144	547	34,228	230	719	3,356	53,800	52,200	1,600	-
	Total	112,867	3,281	6,583	98,203	246	1,013	3,541	115,300	95,500	19,800	15

Source: Flood plain land use, USDA-SCS, Auburn, AL.

CLARKE COUNTY, ALABAMA  
1982 Resource Data

Clarke County's population is predominantly rural. Its nonfederal rural land area is distributed as follows: 2 percent cropland, 3 percent pastureland, 93 percent forest land, and 2 percent in minor uses. Hay, corn, and soybeans are the principal crops grown. The county ranks 63rd in the state in the value of crop sales, 63rd in livestock and poultry sales, and 1st in timber sales. The average sheet and rill erosion rate on cropland, 5.4 tons per acre per year, is 24 percent below the state average. Approximately 60 percent of the cropland needs conservation treatment.

	Population, 1960-1980 <sup>1/</sup>		
	<u>1960</u>	<u>1970</u>	<u>1980</u>
Rural	17,605	16,998	17,242
Urban	8,133	9,726	10,460
Total	25,738	26,724	27,702

	Major Crops <u>1982</u>	Acres Harvested <u>1982 <sup>4/</sup></u>
Number of Farms, 1982 <sup>2/</sup>	Hay	5,700
Avg. Size of Farms, 1982 <sup>2/</sup> (Ac.)	Corn	5,200
Value of Sales, 1982: (Thou.Dollars)	Soybeans	4,500
Crops <sup>2/</sup>		
Livestock and Poultry <sup>2/</sup>		
Timber Sold <sup>3/</sup>		

- <sup>1/</sup> U.S. Census of Population--Urban population consists of all persons living in places (incorporated or unincorporated) of 2,500 inhabitants or more.
- <sup>2/</sup> 1982 Census of Agriculture.
- <sup>3/</sup> Trees -- Alabama's No. 1 Money Crop in 1982, C. W. McKee, Alabama Cooperative Extension Service.
- <sup>4/</sup> Alabama Agricultural Statistics, 1982 Revised.

COUNTY NAME: Clarke

LAND USE, 1982

----- Nonfederal Rural Land -----										
Cropland	Pasture- land	Forest- land	Minor Uses	Total Nonfederal Rural Land	Urban & Built-up 1000 Acs.	Rural Trans- portation	Federal Land	Census Water	Small Water	Total Surface Area (Census)
18.9	20.0	714.7	12.5	766.1	5.8	7.2	1.1	14.2	7.1	801.5

Source: 1982 NRI, adjusted by inter-agency county and state workgroups.

SHEET AND RILL EROSION BY LAND USE, 1982  
RURAL NONFEDERAL LAND

	Area (1000 Acs.)	Average Erosion Rate (Tons/Acre/Year)	Total Erosion (Tons/Year)	Area Eroding At <= T	Area Eroding At >T -- 2T (1,000 Acres)	Area Eroding At > 2T
Cropland-All	18.9	5.4	102.6	9.4	7.2	2.3
Row Crops	4.7	6.4	30.1	1.9	2.2	.6
Pastureland	20.0	.5	10.2	18.7	1.2	.1
Forest Land	714.7	.4	313.7	692.6	6.8	15.3
Minor Uses	12.5	1.6	19.6	9.6	.1	2.9
Total	766.1	.6	446.1	730.3	15.3	20.6

Source: 1982 NRI, adjusted by SCS county personnel and state workgroup.

RURAL NONFEDERAL LAND NEEDING CONSERVATION TREATMENT BY LAND USE, 1982

	Cropland	Pastureland	Forest
----- 1,000 acres -----			
Area Needing Treatment			
For: Erosion Control	10.5	.1	3.8
Other	.8	12.7	531.4
Percent Adequately Protected	40	36	24
Percent Needing Treatment	60	64	75
Percent Not Feasible to Treat	0	0	1

Source: 1982 NRI, adjusted by SCS county personnel and state workgroup.

FLOOD PLAIN LAND USE & AGRICULTURAL FLOOD DAMAGES, 1982

County Area	Floodplain Type	Flood Plain Land Use Acres -----							Average Annual Flood Damages			Number of Sub-W/S In County
		Total	Cropland	Pastureland	Forestland	Urban	Other	Water	Total \$	Cropland \$	Pasture- land \$	
	Tributary	51,447	192	1,709	49,467	7	52	50	9,900	4,800	5,100	-
	Riverine	103,504	1,287	2,010	94,520	63	291	5,333	39,900	33,800	6,100	-
	Total	154,981	1,479	3,719	143,987	70	343	5,383	49,800	38,600	11,200	22

Source: Flood plain land use, USDA-SCS, Auburn, AL.



CLAY COUNTY, ALABAMA  
1982 Resource Data

Clay County's population is predominantly rural. Its nonfederal rural land area is distributed as follows: 2 percent cropland, 10 percent pastureland, 86 percent forest land, and 2 percent in minor uses. Hay is the principal crop grown. The county ranks 67th in the state in the value of crop sales, 26th in poultry sales, 7th in egg sales, and 38th in timber sales. The average sheet and rill erosion rate on cropland, 5.0 tons per acre per year, is 30 percent below the state average. Approximately 64 percent of the cropland needs conservation treatment.

	Population, 1960-1980 <sup>1/</sup>		
	<u>1960</u>	<u>1970</u>	<u>1980</u>
Rural	12,400	12,636	13,703
Urban	0	0	0
Total	12,400	12,636	13,703

		<u>Major Crops 1982</u>	<u>Acres Harvested 1982 <sup>4/</sup></u>
Number of Farms, 1982 <sup>2/</sup>	466	Hay	3,400
Avg. Size of Farms, 1982 <sup>2/</sup> (Ac.)	170	Corn	800
Value of Sales, 1982: (Thou.Dollars)			
Crops <sup>2/</sup>	NA		
Livestock and Poultry <sup>2/</sup>	0		
Timber Sold <sup>3/</sup>	5,433		

<sup>1/</sup> U.S. Census of Population--Urban population consists of all persons living in places (incorporated or unincorporated) of 2,500 inhabitants or more.

<sup>2/</sup> 1982 Census of Agriculture.

<sup>3/</sup> Trees -- Alabama's No. 1 Money Crop in 1982, C. W. McKee, Alabama Cooperative Extension Service.

<sup>4/</sup> Alabama Agricultural Statistics, 1982 Revised.

COUNTY NAME: Clay

LAND USE, 1982

----- Nonfederal Rural Land -----										
Cropland	Pasture- land	Forest- land	Minor Uses	Total Nonfederal Rural Land	Urban & Built-up 1000 Acs.	Rural Trans- portation	Federal Land	Census Water	Small Water	Total Surface Area (Census)
7.6	32.0	261.7	4.8	306.1	2.3	9.6	66.8	0.4	2.3	387.5

Source: 1982 NRI, adjusted by inter-agency county and state workgroups.

SHEET AND RILL EROSION BY LAND USE, 1982  
RURAL NONFEDERAL LAND

	Area (1000 Acs.)	Average Erosion Rate (Tons/Acre/Year)	Total Erosion (Tons/Year)	Area Eroding At <= T	Area Eroding At > T -- 2T (1,000 Acres)	Area Eroding At > 2T
Cropland-All	7.6	5.0	38.3	4.3	1.8	1.5
Row Crops	2.5	7.3	18.2	1.0	.8	.7
Pastureland	32.0	.6	18.4	31.6	.1	.3
Forest Land	261.7	.5	128.8	254.4	3.1	4.2
Minor Uses	4.8	1.6	7.5	4.7	0.0	.1
Total	306.1	0.6	193.0	295.0	5.0	6.1

Source: 1982 NRI, adjusted by SCS county personnel and state workgroup.

RURAL NONFEDERAL LAND NEEDING CONSERVATION TREATMENT BY LAND USE, 1982

	Cropland	Pastureland	Forest
----- 1,000 acres -----			
Area Needing Treatment			
For: Erosion Control	4.3	0.4	1.0
Other	0.5	21.3	167.3
Percent Adequately Protected	36	32	35
Percent Needing Treatment	64	68	64
Percent Not Feasible to Treat	0	0	1

Source: 1982 NRI, adjusted by SCS county personnel and state workgroup.

FLOOD PLAIN LAND USE & AGRICULTURAL FLOOD DAMAGES, 1982

County Area	Floodplain Type	Flood Plain Land Use Acres -----							Average Annual Flood Damages			Number of Sub-W/S In County
		Total	Cropland	Pastureland	Forestland	Urban	Other	Water	Total \$	Cropland \$	Pasture- land \$	
	Tributary	23,764	720	9,939	12,741	0	0	364	55,800	26,000	29,800	-
	Riverine	0	0	0	0	0	0	0	0	0	0	-
	Total	23,764	720	9,939	12,741	0	0	364	55,800	26,000	29,800	16

Source: Flood plain land use, USDA-SCS, Auburn, AL.

CLEBURNE COUNTY, ALABAMA  
1982 Resource Data

Cleburne County's population is predominantly rural. Its nonfederal rural land area is distributed as follows: 2 percent cropland, 9 percent pastureland, 88 percent forest land, and 1 percent in minor uses. Soybeans is the principal crop grown. The county ranks 66th in the state in the value of crop sales, 21st in poultry sales, 17th in egg sales, and 58th in timber sales. The average sheet and rill erosion rate on cropland, 5.0 tons per acre per year, is 30 percent below the state average. Approximately 64 percent of the cropland needs conservation treatment.

	Population, 1960-1980 1/		
	1960	1970	1980
Rural	10,911	8,124	9,581
Urban	0	2,872	3,014
Total	10,911	10,996	12,595

	Major Crops 1982	Acres Harvested 1982 4/
Number of Farms, 1982 2/		
Avg. Size of Farms, 1982 2/ (Ac.)		
Value of Sales, 1982: (Thou.Dollars)		
Crops 2/		
Livestock and Poultry 2/		
Timber Sold 3/		
	Soybeans	4,100
	Wheat	1,900
	Corn	1,600
	Hay	1,100

1/ U.S. Census of Population--Urban population consists of all persons living in places (incorporated or unincorporated) of 2,500 inhabitants or more.

2/ 1982 Census of Agriculture.

3/ Trees -- Alabama's No. 1 Money Crop in 1982, C. W. McKee, Alabama Cooperative Extension Service.

4/ Alabama Agricultural Statistics, 1982 Revised.



COUNTY NAME: Cleburne

LAND USE, 1982

----- Nonfederal Rural Land -----										
Cropland	Pasture- land	Forest- land	Minor Uses	Total Nonfederal Rural Land	Urban & Built-up	Rural Trans- portation	Federal Land	Census Water	Small Water	Total Surface Area (Census)
					1000 Acs.					
6.3	23.0	234.9	2.5	266.7	2.6	8.1	79.8	0.1	1.7	359.0

Source: 1982 NRI, adjusted by inter-agency county and state workgroups.

SHEET AND RILL EROSION BY LAND USE, 1982  
RURAL NONFEDERAL LAND

	Area (1000 Acs.)	Average Erosion Rate (Tons/Acre/Year)	Total Erosion (Tons/Year)	Area Eroding At <= T	Area Eroding At > T -- 2T (1,000 Acres)	Area Eroding At > 2T
Cropland-All	6.3	5.0	31.7	3.6	1.5	1.2
Row Crops	5.0	7.3	31.2 <sup>1/</sup>	2.0	1.6	1.4
Pastureland	23.0	.6	13.3	22.7	.1	.2
Forest Land	234.9	.5	115.6	228.3	2.8	3.8
Minor Uses	2.5	1.6	3.9	2.4	0.0	.1
Total	266.7	0.6	164.5	257.0	4.4	5.3

Source: 1982 NRI, adjusted by SCS county personnel and state workgroup.

<sup>1/</sup> Adjusted downward to reflect original relationship with erosion volume for all cropland.

RURAL NONFEDERAL LAND NEEDING CONSERVATION TREATMENT BY LAND USE, 1982

	Cropland	Pastureland	Forest
----- 1,000 acres -----			
Area Needing Treatment			
For: Erosion Control	3.6	0.3	0.9
Other	0.4	15.3	150.1
Percent Adequately Protected	36	32	35
Percent Needing Treatment	64	68	64
Percent Not Feasible to Treat	0	0	1

Source: 1982 NRI, adjusted by SCS county personnel and state workgroup.

FLOOD PLAIN LAND USE & AGRICULTURAL FLOOD DAMAGES, 1982

County Area	Floodplain Type	Flood Plain Land Use Acres -----							Average Annual Flood Damages			Number of Sub-W/S In County
		Total	Cropland	Pastureland	Forestland	Urban	Other	Water	Total \$	Cropland \$	Pasture- land \$	
	Tributary	11,561	945	3,154	6,241	40	558	623	38,900	29,400	9,500	-
	Riverine	8,371	1,662	2,282	3,265	60	397	705	54,400	47,600	6,800	-
	Total	19,932	2,607	5,436	9,506	100	955	1,328	93,300	77,000	16,300	21

Source: Flood plain land use, USDA-SCS, Auburn, AL.

COFFEE COUNTY, ALABAMA  
1982 Resource Data

Coffee County's population is predominantly urban. Its nonfederal rural land area is distributed as follows: 32 percent cropland, 10 percent pastureland, 54 percent forest land, and 3 percent in minor uses. Soybeans, peanuts, corn, and wheat are the principal crops grown. The county ranks 9th in the state in the value of crop sales, 5th in livestock and poultry sales, and 50th in timber sales. It is one of the leading counties in the production of hogs and broilers. The average sheet and rill erosion rate on cropland, 6.9 tons per acre per year, is 3 percent below the state average. Approximately 60 percent of the cropland needs conservation treatment.

	Population, 1960-1980 1/		
	1960	1970	1980
Rural	14,863	14,647	16,401
Urban	15,720	20,225	22,132
Total	30,583	34,872	38,533

		Major Crops 1982	Acres Harvested 1982 4/
Number of Farms, 1982 2/	944	Soybeans	59,700
Avg. Size of Farms, 1982 2/ (Ac.)	206	Peanuts	22,800
Value of Sales, 1982: (Thou. Dollars)		Corn	14,900
Crops 2/	18,453	Wheat	10,500
Livestock and Poultry 2/	42,076	Hay	4,400
Timber Sold 3/	3,296	G. Sorghum	1,400
		Cotton	1,060

- 1/ U.S. Census of Population--Urban population consists of all persons living in places (incorporated or unincorporated) of 2,500 inhabitants or more.  
2/ 1982 Census of Agriculture.  
3/ Trees -- Alabama's No. 1 Money Crop in 1982, C. W. McKee, Alabama Cooperative Extension Service.  
4/ Alabama Agricultural Statistics, 1982 Revised.

COUNTY NAME: Coffee

LAND USE, 1982

----- Nonfederal Rural Land -----										
Cropland	Pasture- land	Forest- land	Minor Uses	Total Nonfederal Rural Land	Urban & Built-up 1000 Acs.	Rural Trans- portation	Federal Land	Census Water	Small Water	Total Surface Area (Census)
127.8	41.6	217.5	11.2	398.1	7.4	8.7	16.2	0.0	4.9	435.3

Source: 1982 NRI, adjusted by inter-agency county and state workgroups.

SHEET AND RILL EROSION BY LAND USE, 1982  
RURAL NONFEDERAL LAND

	Area (1000 Acs.)	Average Erosion Rate (Tons/Acre/Year)	Total Erosion (Tons/Year)	Area Eroding At < = T	Area Eroding At > T -- 2T (1,000 Acres)	Area Eroding At > 2T
Cropland-All	127.8	6.9	876.5	60.0	40.7	27.1
Row Crops	109.8	7.4	808.0	46.5	38.6	24.7
Pastureland	41.6	.5	20.7	41.2	.2	.2
Forest Land	217.5	.4	91.1	213.1	2.4	2.0
Minor Uses	11.2	7.9	88.2	9.5	.8	.9
Total	398.1	2.7	1,076.5	323.8	44.1	30.2

Source: 1982 NRI, adjusted by SCS county personnel and state workgroup.

RURAL NONFEDERAL LAND NEEDING CONSERVATION TREATMENT BY LAND USE, 1982

	Cropland	Pastureland	Forest
----- 1,000 acres -----			
Area Needing Treatment			
For: Erosion Control	75.2	0.8	3.7
Other	1.3	15.9	101.2
Percent Adequately Protected	40	60	52
Percent Needing Treatment	60	40	48
Percent Not Feasible to Treat	0	0	0

Source: 1982 NRI, adjusted by SCS county personnel and state workgroup.

FLOOD PLAIN LAND USE & AGRICULTURAL FLOOD DAMAGES, 1982

County Area	Floodplain Type	Flood Plain Land Use Acres -----							Average Annual Flood Damages			Number of Sub-W/S In County
		Total	Cropland	Pastureland	Forestland	Urban	Other	Water	Total \$	Cropland \$	Pasture- land \$	
	Tributary	26,823	1,709	31	25,061	22	0	0	84,200	84,100	100	-
	Riverine	22,903	1,590	2,201	18,634	478	0	0	57,400	50,800	6,600	-
	Total	49,726	3,299	2,232	43,695	500	0	0	141,600	134,900	6,700	21

Source: Flood plain land use, USDA-SCS, Auburn, AL.



COLBERT COUNTY, ALABAMA  
1982 Resource Data

Colbert County's population is predominantly urban. Its nonfederal rural land area is distributed as follows: 19 percent cropland, 15 percent pastureland, 63 percent forest land, and 3 percent in minor uses. Cotton, soybeans, wheat and hay are the principal crops grown. The county ranks 10th in the state in the value of crop sales, 35th in livestock and poultry sales, and 46th in timber sales. The average sheet and rill erosion rate on cropland, 8.0 tons per acre per year, is 11 percent above the state average. Approximately 72 percent of the cropland needs conservation treatment.

	Population, 1960-1980 1/		
	1960	1970	1980
Rural	19,951	20,779	24,334
Urban	26,555	28,853	30,185
Total	46,506	49,632	54,519

		Major Crops 1982	Acres Harvested 1982 4/
Number of Farms, 1982 2/	686	Cotton	27,700
Avg. Size of Farms, 1982 2/ (Ac.)	235	Soybeans	26,900
Value of Sales, 1982: (Thou. Dollars)		Wheat	18,400
Crops 2/	18,291	Hay	12,800
Livestock and Poultry 2/	9,668	Corn	3,800
Timber Sold 3/	3,618	G. Sorghum	500

- 1/ U.S. Census of Population--Urban population consists of all persons living in places (incorporated or unincorporated) of 2,500 inhabitants or more.
- 2/ 1982 Census of Agriculture.
- 3/ Trees -- Alabama's No. 1 Money Crop in 1982, C. W. McKee, Alabama Cooperative Extension Service.
- 4/ Alabama Agricultural Statistics, 1982 Revised.

COUNTY NAME: Colbert

LAND USE, 1982

----- Nonfederal Rural Land -----										
Cropland	Pasture- land	Forest- land	Minor Uses	Total Nonfederal Rural Land	Urban & Built-up	Rural Trans- portation	Federal Land	Census Water	Small water	Total Surface Area (Census)
----- 1000 Acs. -----										
63.9	53.1	216.0	11.0	344.0	20.0	7.2	2.7	22.2	3.2	399.3

Source: 1982 NRI, adjusted by inter-agency county and state workgroups.

SHEET AND RILL EROSION BY LAND USE, 1982  
RURAL NONFEDERAL LAND

	Area (1000 Acs.)	Average Erosion Rate (Tons/Acre/Year)	Total Erosion (Tons/Year)	Area Eroding At <= T	Area Eroding At > T -- 2T (1,000 Acres)	Area Eroding At > 2T
Cropland-All	63.9	8.0	508.9	23.9	17.7	22.3
Row Crops	53.8	8.7	467.8	17.1	16.5	20.2
Pastureland	53.1	.9	45.1	50.6	1.7	.8
Forest Land	216.0	.6	133.0	211.2	2.7	2.1
Minor Uses	11.0	39.9	438.4	8.6	.4	2.0
Total	344.0	3.3	1125.6	292.9	24.1	27.0

Source: 1982 NRI, adjusted by SCS county personnel and state workgroup.

RURAL NONFEDERAL LAND NEEDING CONSERVATION TREATMENT BY LAND USE, 1982

	Cropland	Pastureland	Forest
----- 1,000 acres -----			
Area Needing Treatment			
For: Erosion Control	43.2	1.2	1.4
Other	2.9	24.4	156.8
Percent Adequately Protected	28	52	23
Percent Needing Treatment	72	48	74
Percent Not Feasible to Treat	0	0	3

Source: 1982 NRI, adjusted by SCS county personnel and state workgroup.

FLOOD PLAIN LAND USE & AGRICULTURAL FLOOD DAMAGES, 1982

County Area	Floodplain Type	Flood Plain Land Use Acres -----							Average Annual Flood Damages			Number of Sub-W/S In County
		Total	Cropland	Pastureland	Forestland	Urban	Other	Water	Total \$	Cropland \$	Pasture- land \$	
	Tributary	30,782	8,748	6,183	13,005	1,032	1,511	303	339,900	321,300	18,600	-
	Riverine	19,505	0	0	0	0	0	19,505	0	0	0	-
	Total	50,287	8,748	6,183	13,005	1,032	1,511	19,808	339,900	321,300	18,600	10

Source: Flood plain land use, USDA-SCS, Auburn, AL.

CONECUH COUNTY, ALABAMA  
1982 Resource Data

Conecuh County's population is predominantly rural. Its nonfederal rural land area is distributed as follows: 11 percent cropland, 8 percent pastureland, 80 percent forest land, and 1 percent in minor uses. Corn and soybeans are the principal crops grown. The county ranks 38th in the state in the value of crop sales, 55th in livestock and poultry sales, and 13th in timber sales. The average sheet and rill erosion rate on cropland, 6.9 tons per acre per year, is 3 percent below the state average. Approximately 60 percent of the cropland needs conservation treatment.

	Population, 1960-1980 1/		
	1960	1970	1980
Rural	14,068	11,721	11,713
Urban	3,694	3,924	4,171
Total	17,762	15,645	15,884

		Major Crops 1982	Acres Harvested 1982 4/
Number of Farms, 1982 2/	483	Corn	22,200
Avg. Size of Farms, 1982 2/ (Ac.)	278	Soybeans	19,900
Value of Sales, 1982: (Thou. Dollars)		Hay	12,800
Crops 2/	5,450	Wheat	7,400
Livestock and Poultry 2/	4,184	Peanuts	2,300
Timber Sold 3/	11,308	Cotton	430

- 1/ U.S. Census of Population--Urban population consists of all persons living in places (incorporated or unincorporated) of 2,500 inhabitants or more.
- 2/ 1982 Census of Agriculture.
- 3/ Trees -- Alabama's No. 1 Money Crop in 1982, C. W. McKee, Alabama Cooperative Extension Service.
- 4/ Alabama Agricultural Statistics, 1982 Revised.



COUNTY NAME: Conecuh

LAND USE, 1982

----- Nonfederal Rural Land -----										
Cropland	Pasture- land	Forest- land	Minor Uses	Total Nonfederal Rural Land	Urban & Built-up 1000 Acs.	Rural Trans- portation	Federal Land	Census Water	Small Water	Total Surface Area (Census)
55.7	43.2	424.7	4.4	528.0	3.9	8.4	0.0	0.1	6.2	546.6

Source: 1982 NRI, adjusted by inter-agency county and state workgroups.

SHEET AND RILL EROSION BY LAND USE, 1982  
RURAL NONFEDERAL LAND

	Area (1000 Acs.)	Average Erosion Rate (Tons/Acre/Year)	Total Erosion (Tons/Year)	Area Eroding At <= T	Area Eroding At > T -- 2T (1,000 Acres)	Area Eroding At > 2T
Cropland-All	55.7	6.9	382.0	27.1	18.4	12.2
Row Crops	50.5	7.4	371.6	21.4	17.8	11.3
Pastureland	43.2	.5	21.5	42.9	.1	.2
Forest Land	424.7	.4	177.9	416.2	4.6	3.9
Minor Uses	4.4	7.9	34.6	3.7	.3	.4
Total	528.0	1.2	616.0	489.9	23.4	16.7

Source: 1982 NRI, adjusted by SCS county personnel and state workgroup.

RURAL NONFEDERAL LAND NEEDING CONSERVATION TREATMENT BY LAND USE, 1982

	Cropland	Pastureland	Forest
----- 1,000 acres -----			
Area Needing Treatment			
For: Erosion Control	33.9	0.8	7.2
Other	0.6	16.5	197.6
Percent Adequately Protected	40	60	52
Percent Needing Treatment	60	40	48
Percent Not Feasible to Treat	0	0	0

Source: 1982 NRI, adjusted by SCS county personnel and state workgroup.

FLOOD PLAIN LAND USE & AGRICULTURAL FLOOD DAMAGES, 1982

County Area	Floodplain Type	Flood Plain Land Use Acres -----							Average Annual Flood Damages			Number of Sub-W/S In County
		Total	Cropland	Pastureland	Forestland	Urban	Other	Water	Total \$	Cropland \$	Pasture- land \$	
	Tributary	53,664	142	813	52,462	137	0	90	6,700	4,300	2,400	-
	Riverine	1,711	0	0	1,686	0	0	25	0	0	0	-
	Total	55,355	142	813	54,148	137	0	115	6,700	4,300	2,400	12

Source: Flood plain land use, USOA-SCS, Auburn, AL.

COOSA COUNTY, ALABAMA  
1982 Resource Data

Coosa County's population is predominantly rural. Its nonfederal rural land area is distributed as follows: 1 percent cropland, 3 percent pastureland, 95 percent forest land, and 1 percent in minor uses. Hay is the principal crop. The county ranks 65th in the state in the value of crop sales, 64th in livestock and poultry sales, and 31st in timber sales. The average sheet and rill erosion rate on cropland, 5.0 tons per acre per year, is 30 percent below the state average. Approximately 64 percent of the cropland needs conservation treatment.

	Population, 1960-1980 1/		
	<u>1960</u>	<u>1970</u>	<u>1980</u>
Rural	10,726	10,662	11,377
Urban	0	0	0
Total	10,726	10,662	11,377

		<u>Major Crops 1982</u>	<u>Acres Harvested 1982 4/</u>
Number of Farms, 1982 2/	299	Hay	5,600
Avg. Size of Farms, 1982 2/ (Ac.)	207		
Value of Sales, 1982: (Thou. Dollars)			
Crops 2/	149		
Livestock and Poultry 2/	2,142		
Timber Sold 3/	6,297		

- 1/ U.S. Census of Population--Urban population consists of all persons living in places (incorporated or unincorporated) of 2,500 inhabitants or more.  
2/ 1982 Census of Agriculture.  
3/ Trees -- Alabama's No. 1 Money Crop in 1982, C. W. McKee, Alabama Cooperative Extension Service.  
4/ Alabama Agricultural Statistics, 1982 Revised.

COUNTY NAME: Coosa

LAND USE, 1982

----- Nonfederal Rural Land -----										
Cropland	Pasture- land	Forest- land	Minor Uses	Total Nonfederal Rural Land	Urban & Built-up 1000 Acs.	Rural Trans- portation	Federal Land	Census Water	Small Water	Total Surface Area (Census)
4.0	13.7	367.4	3.4	408.5	2.0	6.2	0.0	5.9	3.9	426.5

Source: 1982 NRI, adjusted by inter-agency county and state workgroups.

SHEET AND RILL EROSION BY LAND USE, 1982  
RURAL NONFEDERAL LAND

	Area (1000 Acs.)	Average Erosion Rate (Tons/Acre/Year)	Total Erosion (Tons/Year)	Area Eroding At <= T	Area Eroding At > T -- 2T (1,000 Acres)	Area Eroding At > 2T
Cropland-All	4.0	5.0	20.1	2.3	.9	.8
Row Crops	1.3	7.3	9.5	.5	.4	.4
Pastureland	13.7	.6	8.0	13.5	.1	.1
Forest Land	367.4	.5	192.1	376.5	4.7	6.2
Minor Uses	3.4	1.6	5.3	3.3	0.0	.1
Total	408.5	0.6	225.5	395.6	5.7	7.2

Source: 1982 NRI, adjusted by SCS county personnel and state workgroup.

RURAL NONFEDERAL LAND NEEDING CONSERVATION TREATMENT BY LAND USE, 1982

	Cropland	Pastureland	Forest
----- 1,000 acres -----			
Area Needing Treatment			
For: Erosion Control	2.3	0.2	1.4
Other	0.3	8.7	248.2
Percent Adequately Protected	36	35	34
Percent Needing Treatment	64	65	65
Percent Not Feasible to Treat	0	0	1

Source: 1982 NRI, adjusted by SCS county personnel and state workgroup.

FLOOD PLAIN LAND USE & AGRICULTURAL FLOOD DAMAGES, 1982

County Area	Floodplain Type	Flood Plain Land Use Acres -----							Average Annual Flood Damages			Number of Sub-W/S in County
		Total	Cropland	Pastureland	Forestland	Urban	Other	Water	Total \$	Cropland \$	Pasture- land \$	
	Tributary	7,041	139	1,860	4,976	0	66	0	10,400	4,800	5,600	-
	Riverine	17,897	0	26	4,509	0	0	13,362	100	0	100	-
	Total	24,938	139	1,886	9,485	0	66	13,362	10,500	4,800	5,700	10

Source: Flood plain land use, USDA-SCS, Auburn, AL.



COVINGTON COUNTY, ALABAMA  
1982 Resource Data

Covington County's population is predominantly rural. Its nonfederal rural land area is distributed as follows: 19 percent cropland, 6 percent pastureland, 74 percent forest land, and 1 percent in minor uses. Soybeans is the principal crop grown. The county ranks 17th in the state in the value of crop sales, 12th in livestock and poultry sales, and 22nd in timber sales. It is a leader in pecan and hog production and important in broiler production. The average sheet and rill erosion rate on cropland, 6.9 tons per acre per year, is 3 percent below the state average. Approximately 60 percent of the cropland needs conservation treatment.

	Population, 1960-1980 1/		
	1960	1970	1980
Rural	16,818	14,793	19,231
Urban	18,813	19,286	17,619
Total	35,631	34,079	36,850

		Major Crops 1982	Acres Harvested 1982 4/
Number of Farms, 1982 2/	1,006	Soybeans	54,300
Avg. Size of Farms, 1982 2/ (Ac.)	192	Wheat	11,800
Value of Sales, 1982: (Thou. Dollars)		Hay	10,100
Crops 2/	13,302	Peanuts	9,800
Livestock and Poultry 2/	21,127	Corn	7,400
Timber Sold 3/	7,881	G. Sorghum	2,800
		Cotton	460

- 1/ U.S. Census of Population--Urban population consists of all persons living in places (incorporated or unincorporated) of 2,500 inhabitants or more.
- 2/ 1982 Census of Agriculture.
- 3/ Trees -- Alabama's No. 1 Money Crop in 1982, C. W. McKee, Alabama Cooperative Extension Service.
- 4/ Alabama Agricultural Statistics, 1982 Revised.

COUNTY NAME: Covington

LAND USE, 1982

----- Nonfederal Rural Land -----										
Cropland	Pasture- land	Forest- land	Minor Uses	Total Nonfederal Rural Land	Urban & Built-up 1000 Acs.	Rural Trans- portation	Federal Land	Census Water	Small Water	Total Surface Area (Census)
113.7	34.6	436.3	5.1	589.7	7.4	9.3	53.8	3.9	4.1	668.2

Source: 1982 NRI, adjusted by inter-agency county and state workgroups.

SHEET AND RILL EROSION BY LAND USE, 1982  
RURAL NONFEDERAL LAND

	Area (1000 Acs.)	Average Erosion Rate (Tons/Acre/Year)	Total Erosion (Tons/Year)	Area Eroding At <= T	Area Eroding At > T -- 2T (1,000 Acres)	Area Eroding At > 2T
Cropland-All	113.7	6.9	779.8	53.4	36.2	24.1
Row Crops	81.6	7.4	600.5	34.6	28.7	18.3
Pastureland	34.6	.5	17.2	34.4	.1	.2
Forest Land	436.3	.4	182.8	427.5	4.8	4.0
Minor Uses	5.1	7.9	40.2	4.3	.4	.4
Total	589.7	1.7	1,020.0	519.6	41.5	28.7

Source: 1982 NRI, adjusted by SCS county personnel and state workgroup.

RURAL NONFEDERAL LAND NEEDING CONSERVATION TREATMENT BY LAND USE, 1982

	Cropland	Pastureland	Forest
----- 1,000 acres -----			
Area Needing Treatment			
For: Erosion Control	66.9	0.6	7.4
Other	1.2	13.2	203.0
Percent Adequately Protected	40	60	52
Percent Needing Treatment	60	40	48
Percent Not Feasible to Treat	0	0	0

Source: 1982 NRI, adjusted by SCS county personnel and state workgroup.

FLOOD PLAIN LAND USE & AGRICULTURAL FLOOD DAMAGES, 1982

County Area	Floodplain Type	Flood Plain Land Use Acres -----							Average Annual Flood Damages			Number of Sub-W/S In County
		Total	Cropland	Pastureland	Forestland	Urban	Other	Water	Total \$	Cropland \$	Pasture- land \$	
	Tributary	52,808	128	103	51,543	6	0	1,028	3,900	3,600	300	-
	Riverine	22,970	1,071	200	19,274	10	80	2,335	31,800	31,200	600	-
	Total	75,778	1,199	303	70,817	16	80	3,363	35,700	34,800	900	22

Source: Flood plain land use, USDA-SCS, Auburn, AL.

CRENSHAW COUNTY, ALABAMA  
1982 Resource Data

Crenshaw County's population is predominantly rural. Its nonfederal rural land area is distributed as follows: 16 percent cropland, 8 percent pastureland, 75 percent forest land, and 1 percent in minor uses. Corn, soybeans, and peanuts are the principal crops grown. The county ranks 27th in the state in the value of crop sales, 7th in livestock and poultry sales, and 26th in timber sales. It is a leader in broiler production and important in egg production. The average sheet and rill erosion rate on cropland, 6.9 tons per acre per year, is 3 percent below the state average. Approximately 60 percent of the cropland needs conservation treatment.

	Population, 1960-1980 1/		
	<u>1960</u>	<u>1970</u>	<u>1980</u>
Rural	14,909	13,188	11,471
Urban	0	0	2,639
Total	14,909	13,188	14,110

		<u>Major Crops 1982</u>	<u>Acres Harvested 1982 4/</u>
Number of Farms, 1982 <u>2/</u>	558	Corn	14,400
Avg. Size of Farms, 1982 <u>2/</u> (Ac.)	241	Soybeans	12,400
Value of Sales, 1982: (Thou. Dollars)		Peanuts	7,100
Crops <u>2/</u>	8,067	Wheat	4,300
Livestock and Poultry <u>2/</u>	36,278	Hay	2,700
Timber Sold <u>3/</u>	7,212	G. Sorghum	1,800
		Cotton	1,730

- 1/ U.S. Census of Population--Urban population consists of all persons living in places (incorporated or unincorporated) of 2,500 inhabitants or more.
- 2/ 1982 Census of Agriculture.
- 3/ Trees -- Alabama's No. 1 Money Crop in 1982, C. W. McKee, Alabama Cooperative Extension Service.
- 4/ Alabama Agricultural Statistics, 1982 Revised.



COUNTY NAME: Crenshaw

LAND USE, 1982

----- Nonfederal Rural Land -----										
Cropland	Pasture- land	Forest- land	Minor Uses	Total Nonfederal Rural Land	Urban & Built-up 1000 Acs.	Rural Trans- portation	Federal Land	Census Water	Small Water	Total Surface Area (Census)
59.4	31.5	276.9	5.0	372.8	4.2	10.4	0.0	0.1	3.5	391.0

Source: 1982 NRI, adjusted by inter-agency county and state workgroups.

SHEET AND RILL EROSION BY LAND USE, 1982  
RURAL NONFEDERAL LAND

	Area (1000 Acs.)	Average Erosion Rate (Tons/Acre/Year)	Total Erosion (Tons/Year)	Area Eroding At <= T	Area Eroding At > T -- 2T (1,000 Acres)	Area Eroding At > 2T
Cropland-All	59.4	6.9	407.4	27.9	18.9	12.6
Row Crops	40.5	7.4	298.0	17.2	14.2	9.1
Pastureland	31.5	.5	15.8	31.2	.1	.1
Forest Land	276.9	.4	117.2	271.4	3.0	2.6
Minor Uses	5.0	7.9	39.4	4.9	.1	0.1
Total	372.8	1.6	579.8	335.4	22.1	15.4

Source: 1982 NRI, adjusted by SCS county personnel and state workgroup.

RURAL NONFEDERAL LAND NEEDING CONSERVATION TREATMENT BY LAND USE, 1982

	Cropland	Pastureland	Forest
----- 1,000 acres -----			
Area Needing Treatment			
For: Erosion Control	34.9	0.6	4.7
Other	0.6	12.1	128.3
Percent Adequately Protected	40	60	52
Percent Needing Treatment	60	40	48
Percent Not Feasible to Treat	0	0	0

Source: 1982 NRI, adjusted by SCS county personnel and state workgroup.

FLOOD PLAIN LAND USE & AGRICULTURAL FLOOD DAMAGES, 1982

County Area	Floodplain Type	Flood Plain Land Use Acres -----							Average Annual Flood Damages			Number of Sub-w/S In County
		Total	Cropland	Pastureland	Forestland	Urban	Other	Water	Total \$	Cropland \$	Pasture- land \$	
	Tributary	40,902	134	565	40,203	0	0	0	7,400	5,700	1,700	-
	Riverine	8,312	25	46	8,214	0	27	0	900	700	200	-
	Total	49,214	159	611	48,417	0	27	0	8,300	6,400	1,900	14

Source: Flood plain land use, USDA-SCS, Auburn, AL.

CULLMAN COUNTY, ALABAMA  
1982 Resource Data

Cullman County's population is predominantly rural. Its nonfederal rural land area is distributed as follows: 18 percent cropland, 28 percent pastureland, 51 percent forest land, and 3 percent in minor uses. Soybeans, hay, and wheat are the principal crops grown. The county ranks 24th in the state in the value of crop sales, 1st in livestock and poultry sales, and 36th in timber sales. It is the leading producer of broilers, eggs and sweet potatoes and important in the production of beef cattle and milk. The average sheet and rill erosion rate on cropland, 8.1 tons per acre per year, is 14 percent above the state average. Approximately 79 percent of the cropland needs conservation treatment.

	Population, 1960-1980 1/		
	1960	1970	1980
Rural	14,909	13,188	11,471
Urban	0	0	2,639
Total	14,909	13,188	14,110

		Major Crops 1982	Acres Harvested 1982 4/
Number of Farms, 1982 2/	2,303	Soybeans	44,200
Avg. Size of Farms, 1982 2/ (Ac.)	89	Hay	28,000
Value of Sales, 1982: (Thou. Dollars)		Wheat	18,900
Crops 2/	9,962	Corn	4,600
Livestock and Poultry 2/	111,049	Cotton	1,280
Timber Sold 3/	5,458	G. Sorghum	900

- 1/ U.S. Census of Population--Urban population consists of all persons living in places (incorporated or unincorporated) of 2,500 inhabitants or more.  
2/ 1982 Census of Agriculture.  
3/ Trees -- Alabama's No. 1 Money Crop in 1982, C. W. McKee, Alabama Cooperative Extension Service.  
4/ Alabama Agricultural Statistics, 1982 Revised.

----- Nonfederal Rural Land -----										
Cropland	Pasture- land	Forest- land	Minor Uses	Total Nonfederal Rural Land	Urban & Built-up 1000 Acs.	Rural Trans- portation	Federal Land	Census Water	Small Water	Total Surface Area (Census)
82.6	123.1	225.9	15.4	447.0	7.3	13.5	0.0	8.9	4.4	481.1

Source: 1982 NRI, adjusted by inter-agency county and state workgroups.

SHEET AND RILL EROSION BY LAND USE, 1982  
RURAL NONFEDERAL LAND

	Area (1000 Acs.)	Average Erosion Rate (Tons/Acre/Year)	Total Erosion (Tons/Year)	Area Eroding At <= T	Area Eroding At > T -- 2T (1,000 Acres)	Area Eroding At > 2T
Cropland-All	82.6	8.1	672.4	21.0	18.7	43.0
Row Crops	52.4	9.5	496.5	8.0	12.5	31.9
Pastureland	123.1	.7	83.9	116.9	3.4	2.7
Forest Land	225.9	.8	188.0	217.8	3.6	4.5
Minor Uses	15.4	203.7	3,136.4	9.0	.7	5.7
Total	447.0	9.1	4,080.7	364.7	26.4	55.9

Source: 1982 NRI, adjusted by SCS county personnel and state workgroup.

## RURAL NONFEDERAL LAND NEEDING CONSERVATION TREATMENT BY LAND USE, 1982

	Cropland	Pastureland	Forest
----- 1,000 acres -----			
Area Needing Treatment			
For: Erosion Control	64.6	0.7	1.5
Other	0.9	59.3	172.0
Percent Adequately Protected	21	51	20
Percent Needing Treatment	79	49	77
Percent Not Feasible to Treat	0	0	3

Source: 1982 NRI, adjusted by SCS county personnel and state workgroup.

## FLOOD PLAIN LAND USE &amp; AGRICULTURAL FLOOD DAMAGES, 1982

County Area	Floodplain Type	Flood Plain Land Use Acres -----								Average Annual Flood Damages			Number of Sub-W/S In County
		Total	Cropland	Pastureland	Forestland	Urban	Other	Water	Total \$	Cropland \$	Pasture- land \$		
	Tributary	10,243	0	2,778	6,767	48	0	650	8,300	0	8,300	-	
	Riverine	13,162	0	2,033	1,700	0	0	9,429	6,100	0	6,100	-	
	Total	23,405	0	4,811	8,467	48	0	10,079	14,400	0	14,400	17	

Source: Flood plain land use, USDA-SCS, Auburn, AL.



DALE COUNTY, ALABAMA  
1982 Resource Data

Dale County's population is predominantly urban. Its nonfederal rural land area is distributed as follows: 29 percent cropland, 9 percent pastureland, 60 percent forest land, and 2 percent in minor uses. Peanuts, corn, and soybeans are the principal crops grown. The county ranks 18th in the state in the value of crop sales, 42nd in livestock and poultry sales, and 59th in timber sales. The average sheet and rill erosion rate on cropland, 5.7 tons per acre per year, is 20 percent below the state average. Approximately 54 percent of the cropland needs conservation treatment.

	Population, 1960-1980 1/		
	1960	1970	1980
Rural	21,529	19,959	18,260
Urban	9,537	32,979	29,561
Total	31,066	52,938	47,821

		Major Crops 1982	Acres Harvested 1982 4/
Number of Farms, 1982 2/	582	Peanuts	15,000
Avg. Size of Farms, 1982 2/ (Ac.)	232	Corn	14,600
Value of Sales, 1982: (Thou.Dollars)		Soybeans	13,800
Crops 2/	13,223	Wheat	6,100
Livestock and Poultry 2/	8,349	Hay	900
Timber Sold 3/	2,209	G. Sorghum	900
		Cotton	460

- 1/ U.S. Census of Population--Urban population consists of all persons living in places (incorporated or unincorporated) of 2,500 inhabitants or more.  
2/ 1982 Census of Agriculture.  
3/ Trees -- Alabama's No. 1 Money Crop in 1982, C. W. McKee, Alabama Cooperative Extension Service.  
4/ Alabama Agricultural Statistics, 1982 Revised.

COUNTY NAME: Dale

## LAND USE, 1982

----- Nonfederal Rural Land -----										
Cropland	Pasture- land	Forest- land	Minor Uses	Total Nonfederal Rural Land	Urban & Built-up 1000 Acs.	Rural Trans- portation	Federal Land	Census Water	Small water	Total Surface Area (Census)
86.6	26.2	180.2	6.4	299.4	7.9	5.9	43.9	0.9	2.2	360.2

Source: 1982 NRI, adjusted by inter-agency county and state workgroups.

SHEET AND RILL EROSION BY LAND USE, 1982  
RURAL NONFEDERAL LAND

	Area (1000 Acs.)	Average Erosion Rate (Tons/Acre/Year)	Total Erosion (Tons/Year)	Area Eroding At <= T	Area Eroding At > T -- 2T (1,000 Acres)	Area Eroding At > 2T
Cropland-All	86.6	5.7	493.7	45.1	29.0	12.5
Row Crops	63.0	6.6	412.8	26.7	25.8	10.5
Pastureland	26.2	.7	17.3	24.7	1.5	0.0
Forest Land	180.2	1.1	196.1	172.1	3.4	4.7
Minor Uses	6.4	.8	5.2	6.4	0.0	0.0
Total	299.4	2.4	712.3	248.3	33.9	17.2

Source: 1982 NRI, adjusted by SCS county personnel and state workgroup.

## RURAL NONFEDERAL LAND NEEDING CONSERVATION TREATMENT BY LAND USE, 1982

	Cropland	Pastureland	Forest
----- 1,000 acres -----			
Area Needing Treatment			
For: Erosion Control	46.4	2.9	5.2
Other	0	4.1	82.6
Percent Adequately Protected	46	73	51
Percent Needing Treatment	54	27	49
Percent Not Feasible to Treat	0	0	0

Source: 1982 NRI, adjusted by SCS county personnel and state workgroup.

## FLOOD PLAIN LAND USE &amp; AGRICULTURAL FLOOD DAMAGES, 1982

County Area	Floodplain Type	Flood Plain Land Use Acres							Average Annual Flood Damages			Number of Sub-W/S In County
		Total	Cropland	Pastureland	Forestland	Urban	Other	Water	Total \$	Cropland \$	Pasture- land \$	
	Tributary	21,889	71	110	20,931	12	0	765	2,300	2,000	300	-
	Riverine	16,290	138	347	15,793	0	12	0	5,500	4,400	1,100	-
	Total	36,179	209	457	36,724	12	12	765	7,800	6,400	1,400	21

Source: Flood plain land use, USDA-SCS, Auburn, AL.

DALLAS COUNTY, ALABAMA  
1982 Resource Data

Dallas County's population is predominantly urban. Its nonfederal rural land area is distributed as follows: 26 percent cropland, 18 percent pastureland, 55 percent forest land, and 1 percent in minor uses. Soybeans and wheat are the principal crops grown. The county ranks 11th in the state in the value of crop sales, 30th in livestock and poultry sales, and 3rd in timber sales. It is one of the leading counties in commercial catfish production and cattle production. The average sheet and rill erosion rate on cropland, 6.3 tons per acre per year, is 11 percent below the state average. Approximately 61 percent of the cropland needs conservation treatment.

	Population, 1960-1980 1/		
	1960	1970	1980
Rural	28,277	27,919	22,042
Urban	28,390	27,379	31,939
Total	56,667	55,296	53,981

		Major Crops 1982	Acres Harvested 1982 4/
Number of Farms, 1982 2/	557	Soybeans	82,400
Avg. Size of Farms, 1982 2/ (Ac.)	549	Wheat	45,300
Value of Sales, 1982: (Thou. Dollars)		Hay	21,500
Crops 2/	18,207	Cotton	14,800
Livestock and Poultry 2/	11,858	G. Sorghum	2,200
Timber Sold 3/	21,324	Corn	700

- 1/ U.S. Census of Population--Urban population consists of all persons living in places (incorporated or unincorporated) of 2,500 inhabitants or more.
- 2/ 1982 Census of Agriculture.
- 3/ Trees -- Alabama's No. 1 Money Crop in 1982, C. W. McKee, Alabama Cooperative Extension Service.
- 4/ Alabama Agricultural Statistics, 1982 Revised.



COUNTY NAME: Dallas

LAND USE, 1982

----- Nonfederal Rural Land -----										
Cropland	Pasture- land	Forest- land	Minor Uses	Total Nonfederal Rural Land	Urban & Built-up 1000 Acs.	Rural Trans- portation	Federal Land	Census Water	Small Water	Total Surface Area (Census)
156.2	108.4	324.4	3.4	592.4	10.9	10.0	3.9	12.2	6.8	636.2

Source: 1982 NRI, adjusted by inter-agency county and state workgroups.

SHEET AND RILL EROSION BY LAND USE, 1982  
RURAL NONFEDERAL LAND

	Area (1000 Acs.)	Average Erosion Rate (Tons/Acre/Year)	Total Erosion (Tons/Year)	Area Eroding At <= T	Area Eroding At > T -- 2T (1,000 Acres)	Area Eroding At > 2T
Cropland-All	156.2	6.3	977.6	79.3	41.9	35.0
Row Crops	141.2	7.3	939.5 <sup>1/</sup>	56.9	47.5	36.8
Pastureland	108.4	.7	74.4	104.0	2.9	1.5
Forest Land	324.4	.7	239.1	318.2	1.1	5.1
Minor Uses	3.4	14.3	47.8	2.8	.2	.4
Total	592.4	2.3	1,338.9	504.3	46.1	42.0

Source: 1982 NFI, adjusted by SCS county personnel and state workgroup.

<sup>1/</sup> Adjusted downward to reflect original relationship with erosion volume for all cropland.

RURAL NONFEDERAL LAND NEEDING CONSERVATION TREATMENT BY LAND USE, 1982

	Cropland	Pastureland	Forest
----- 1,000 acres -----			
Area Needing Treatment			
For: Erosion Control	89.0	5.9	6.3
Other	6.7	44.8	169.8
Percent Adequately Protected	39	53	45
Percent Needing Treatment	61	47	54
Percent Not Feasible to Treat	0	0	1

Source: 1982 NRI, adjusted by SCS county personnel and state workgroup.

FLOOD PLAIN LAND USE & AGRICULTURAL FLOOD DAMAGES, 1982

County Area	Floodplain Type	Flood Plain Land Use Acres -----							Average Annual Flood Damages			Number of Sub-W/S In County
		Total	Cropland	Pastureland	Forestland	Urban	Other	Water	Total \$	Cropland \$	Pasture- land \$	
	Tributary	61,509	9,138	4,898	47,229	0	244	0	270,600	255,900	14,700	-
	Riverine	112,511	22,415	7,896	68,910	553	1,097	11,640	846,100	822,400	23,700	-
	Total	174,020	31,553	12,794	116,139	553	1,341	11,640	1,116,700	1,078,300	38,400	19

Source: Flood plain land use, USDA-SCS, Auburn, AL.

DEKALB COUNTY, ALABAMA  
1982 Resource Data

DeKalb County's population is predominantly rural. Its nonfederal rural land area is distributed as follows: 18 percent cropland, 20 percent pastureland, 60 percent forest land, and 3 percent in minor uses. Soybeans, wheat, and corn are the principal crops grown. The county ranks 14th in the state in the value of crop sales, 2nd in livestock and poultry sales, and 60th in timber sales. It is the leading producer of Irish potatoes, a leading producer of hogs, broilers, and eggs, and an important county in milk production. The average sheet and rill erosion rate on cropland, 8.1 tons per acre per year, is 14 percent above the state average. Approximately 79 percent of the cropland needs conservation treatment.

	Population, 1960-1980 1/		
	<u>1960</u>	<u>1970</u>	<u>1980</u>
Rural	34,376	33,546	38,266
Urban	7,041	8,435	15,392
Total	41,417	41,981	53,658

		<u>Major Crops 1982</u>	<u>Acres Harvested 1982 4/</u>
Number of Farms, 1982 <u>2/</u>	2,228	Soybeans	71,000
Avg. Size of Farms, 1982 <u>2/</u> (Ac.)	99	Wheat	36,200
Value of Sales, 1982: (Thou. Dollars)		Corn	23,100
Crops <u>2/</u>	15,378	Hay	15,300
Livestock and Poultry <u>2/</u>	82,884	G. Sorghum	5,200
Timber Sold <u>3/</u>	2,100	Cotton	1,420

- 1/ U.S. Census of Population--Urban population consists of all persons living in places (incorporated or unincorporated) of 2,500 inhabitants or more.
- 2/ 1982 Census of Agriculture.
- 3/ Trees -- Alabama's No. 1 Money Crop in 1982, C. W. McKee, Alabama Cooperative Extension Service.
- 4/ Alabama Agricultural Statistics, 1982 Revised.

----- Nonfederal Rural Land -----										
Cropland	Pasture- land	Forest- land	Minor Uses	Total Nonfederal Rural Land	Urban & Built-up 1000 Acs.	Rural Trans- portation	Federal Land	Census Water	Small Water	Total Surface Area (Census)
82.2	91.4	277.9	11.9	463.4	13.5	17.5	0.0	0.4	3.7	498.5

Source: 1982 NRI, adjusted by inter-agency county and state workgroups.

SHEET AND RILL EROSION BY LAND USE, 1982  
RURAL NONFEDERAL LAND

	Area (1000 Acs.)	Average Erosion Rate (Tons/Acre/Year)	Total Erosion (Tons/Year)	Area Eroding At < = T	Area Eroding At > T -- 2T (1,000 Acres)	Area Eroding At > 2T
Cropland-All	82.2	8.1	668.2	21.3	18.8	42.1
Row Crops	73.9	9.4	649.0 <sup>1/</sup>	11.8	17.9	44.2
Pastureland	91.4	.6	55.2	88.3	1.6	1.5
Forest Land	277.9	.5	141.9	271.0	4.0	2.9
Minor Uses	11.9	165.2	1,965.6	7.3	.5	4.1
Total	463.4	6.1	2,830.9	387.9	24.9	50.6

Source: 1982 NRI, adjusted by SCS county personnel and state workgroup.

<sup>1/</sup> Adjusted downward to reflect original relationship with erosion volume for all cropland.

RURAL NONFEDERAL LAND NEEDING CONSERVATION TREATMENT BY LAND USE, 1982

	Cropland	Pastureland	Forest
----- 1,000 acres -----			
Area Needing Treatment			
For: Erosion Control	63.9	0.4	1.5
Other	1.0	43.7	193.9
Percent Adequately Protected	21	52	26
Percent Needing Treatment	79	48	71
Percent Not Feasible to Treat	0	0	3

Source: 1982 NRI, adjusted by SCS county personnel and state workgroup.

FLOOD PLAIN LAND USE & AGRICULTURAL FLOOD DAMAGES, 1982

County Area	Floodplain Type	Flood Plain Land Use Acres -----							Average Annual Flood Damages			Number of Sub-W/S In County
		Total	Cropland	Pastureland	Forestland	Urban	Other	Water	Total \$	Cropland \$	Pasture- land \$	
	Tributary	13,298	462	6,089	5,834	743	58	112	32,400	14,200	18,200	-
	Riverine	0	0	0	0	0	5	0	0	0	0	-
	Total	13,298	462	6,089	5,834	743	58	112	32,400	14,200	18,200	17

Source: Flood plain land use, USDA-SCS, Auburn, AL.



ELMORE COUNTY, ALABAMA  
1982 Resource Data

Elmore County's population is predominantly rural. Its nonfederal rural land area is distributed as follows: 17 percent cropland, 9 percent pastureland, 66 percent forest land, and 8 percent in minor uses. Soybeans, cotton, and hay are the principal crops grown. The county ranks 23rd in the state in the value of crop sales, 38th in livestock and poultry sales, and 49th in timber sales. The average sheet and rill erosion rate on cropland, 5.7 tons per acre per year, is 20 percent below the state average. Approximately 56 percent of the cropland needs conservation treatment.

	Population, 1960-1980 1/		
	<u>1960</u>	<u>1970</u>	<u>1980</u>
Rural	23,687	26,345	32,297
Urban	6,837	7,190	11,093
Total	30,524	33,535	43,390

	Major Crops 1982	Acres Harvested 1982 4/
Number of Farms, 1982 2/		
Avg. Size of Farms, 1982 2/ (Ac.)		
Value of Sales, 1982: (Thou. Dollars)		
Crops 2/		
Livestock and Poultry 2/		
Timber Sold 3/		
	Soybeans	17,000
	Cotton	16,600
	Hay	12,500
	Wheat	5,000
	Corn	2,500

- 1/ U.S. Census of Population--Urban population consists of all persons living in places (incorporated or unincorporated) of 2,500 inhabitants or more.
- 2/ 1982 Census of Agriculture.
- 3/ Trees -- Alabama's No. 1 Money Crop in 1982, C. W. McKee, Alabama Cooperative Extension Service.
- 4/ Alabama Agricultural Statistics, 1982 Revised.

COUNTY NAME: Elmore

LAND USE, 1982

----- Nonfederal Rural Land -----										
Cropland	Pasture- land	Forest- land	Minor Uses	Total Nonfederal Rural Land	Urban & Built-up 1000 Acs.	Rural Trans- portation	Federal Land	Census Water	Small Water	Total Surface Area (Census)
62.3	33.4	242.5	27.5	365.7	15.0	10.7	0.6	22.9	5.8	420.7

Source: 1982 NRI, adjusted by inter-agency county and state workgroups.

SHEET AND RILL EROSION BY LAND USE, 1982  
RURAL NONFEDERAL LAND

	Area (1000 Acs.)	Average Erosion Rate (Tons/Acre/Year)	Total Erosion (Tons/Year)	Area Eroding At <= T	Area Eroding At >T -- 2T (1,000 Acres)	Area Eroding At > 2T
Cropland-All	62.3	5.7	356.0	35.6	15.5	11.2
Row Crops	49.6	7.0	348.2	22.3	16.3	11.0
Pastureland	33.4	.6	20.6	32.4	.6	.4
Forest Land	242.5	.7	161.3	236.7	1.7	4.1
Minor Uses	27.5	13.2	363.5	22.7	1.6	3.2
Total	365.7	2.5	901.4	327.4	19.4	18.9

Source: 1982 NRI, adjusted by SCS county personnel and state workgroup.

RURAL NONFEDERAL LAND NEEDING CONSERVATION TREATMENT BY LAND USE, 1982

	Cropland	Pastureland	Forest
----- 1,000 acres -----			
Area Needing Treatment			
For: Erosion Control	31.7	1.2	3.5
Other	3.0	13.0	147.8
Percent Adequately Protected	44	57	37
Percent Needing Treatment	56	43	62
Percent Not Feasible to Treat	0	0	1

Source: 1982 NRI, adjusted by SCS county personnel and state workgroup.

FLOOD PLAIN LAND USE & AGRICULTURAL FLOOD DAMAGES, 1982

County Area	Floodplain Type	Flood Plain Land Use Acres							Average Annual Flood Damages			Number of Sub-W/S In County
		Total	Cropland	Pastureland	Forestland	Urban	Other	Water	Total \$	Cropland \$	Pasture- land \$	
	Tributary	5,753	0	24	5,353	0	26	350	100	0	100	-
	Riverine	58,551	9,246	3,881	21,805	244	2,094	21,281	344,700	333,100	11,600	-
	Total	64,304	9,246	3,905	27,158	244	2,120	21,631	344,800	333,100	11,700	13

Source: Flood plain land use, USDA-SCS, Auburn, AL.

ESCAMBIA, ALABAMA  
1982 Resource Data

Escambia County's population is predominantly rural. Its nonfederal rural land area is distributed as follows: 13 percent cropland, 2 percent pastureland, 83 percent forest land, and 2 percent in minor uses. Soybeans, corn, and wheat are the principal crops grown. The county ranks 21st in the state in the value of crop sales, 43rd in livestock and poultry sales, and 11th in timber sales. The average sheet and rill erosion rate on cropland, 5.4 tons per acre per year, is 24 percent below the state average. Approximately 60 percent of the cropland needs conservation treatment.

	Population, 1960-1980 1/		
	1960	1970	1980
Rural	16,521	19,866	19,959
Urban	16,990	15,040	18,481
Total	33,511	34,906	38,440

		Major Crops 1982	Acres Harvested 1982 4/
Number of Farms, 1982 2/	542	Soybeans	36,800
Avg. Size of Farms, 1982 2/ (Ac.)	189	Corn	21,200
Value of Sales, 1982: (Thou. Dollars)		Wheat	20,300
Crops 2/	10,892	Hay	3,700
Livestock and Poultry 2/	8,279	Cotton	2,450
Timber Sold 3/	13,606		

- 1/ U.S. Census of Population--Urban population consists of all persons living in places (incorporated or unincorporated) of 2,500 inhabitants or more.
- 2/ 1982 Census of Agriculture.
- 3/ Trees -- Alabama's No. 1 Money Crop in 1982, C. W. McKee, Alabama Cooperative Extension Service.
- 4/ Alabama Agricultural Statistics, 1982 Revised.



COUNTY NAME: Escambia

LAND USE, 1982

----- Nonfederal Rural Land -----										
Cropland	Pasture- land	Forest- land	Minor Uses	Total Nonfederal Rural Land	Urban & Built-up 1000 Acs.	Rural Trans- portation	Federal Land	Census Water	Small Water	Total Surface Area (Census)
71.0	9.9	465.1	8.6	554.6	7.6	10.6	29.0	0.0	6.7	608.5

Source: 1982 NRI, adjusted by inter-agency county and state workgroups.

SHEET AND RILL EROSION BY LAND USE, 1982  
RURAL NONFEDERAL LAND

	Area (1000 Acs.)	Average Erosion Rate (Tons/Acre/Year)	Total Erosion (Tons/Year)	Area Eroding At < = T	Area Eroding At > T -- 2T (1,000 Acres)	Area Eroding At > 2T
Cropland-All	71.0	5.4	385.5	35.1	27.1	8.7
Row Crops	60.8	6.4	381.2 <sup>1/</sup>	24.1	28.3	8.4
Pastureland	9.9	.5	4.9	9.9	.0	.0
Forest Land	465.1	.4	201.6	456.5	5.5	3.1
Minor Uses	8.6	1.6	13.6	8.6	.0	.0
Total	554.6	1.1	605.6	510.1	32.6	11.8

Source: 1982 NRI, adjusted by SCS county personnel and state workgroup.

<sup>1/</sup> Adjusted downward to reflect original relationship with erosion volume for all cropland.

RURAL NONFEDERAL LAND NEEDING CONSERVATION TREATMENT BY LAND USE, 1982

	Cropland	Pastureland	Forest
----- 1,000 acres -----			
Area Needing Treatment			
For: Erosion Control	39.6	.0	2.1
Other	3.1	6.3	344.9
Percent Adequately Protected	40	36	24
Percent Needing Treatment	60	64	75
Percent Not Feasible to Treat	0	0	1

Source: 1982 NRI, adjusted by SCS county personnel and state workgroup.

FLOOD PLAIN LAND USE & AGRICULTURAL FLOOD DAMAGES, 1982

County Area	Floodplain Type	Flood Plain Land Use Acres -----							Average Annual Flood Damages			Number of Sub-W/S In County
		Total	Cropland	Pastureland	Forestland	Urban	Other	Water	Total \$	Cropland \$	Pasture- land \$	
	Tributary	43,524	55	369	42,093	383	514	110	2,600	1,500	1,100	-
	Riverine	31,150	0	0	30,470	20	0	700	0	0	0	-
	Total	74,714	55	369	72,563	403	514	810	2,600	1,500	1,100	24

Source: Flood plain land use, USDA-SCS, Auburn, AL.

ETOWAH COUNTY, ALABAMA  
1982 Resource Data

Etowah County's population is predominantly urban. Its nonfederal rural land area is distributed as follows: 15 percent cropland, 15 percent pastureland, 67 percent forest land, and 3 percent in minor uses. Soybeans is the principal crop grown. The county ranks 48th in the state in the value of crop sales, 15th in livestock and poultry sales, and 47th in timber sales. It is an important county in broiler production. The average sheet and rill erosion rate on cropland, 7.9 tons per acre per year, is 11 percent above the state average. Approximately 73 percent of the cropland needs conservation treatment.

	Population, 1960-1980 1/		
	<u>1960</u>	<u>1970</u>	<u>1980</u>
Rural	28,027	26,276	27,968
Urban	68,953	67,868	75,089
Total	96,980	94,144	103,053

		<u>Major Crops</u> <u>1982</u>	<u>Acres Harvested</u> <u>1982 4/</u>
Number of Farms, 1982 2/	998	Soybeans	25,900
Avg. Size of Farms, 1982 2/ (Ac.)	118	Hay	15,500
Value of Sales, 1982: (Thou.Dollars)		Wheat	7,000
Crops 2/	3,764	G. Sorghum	5,200
Livestock and Poultry 2/	18,506	Corn	4,700
Timber Sold 3/	3,522	Cotton	760

- 1/ U.S. Census of Population--Urban population consists of all persons living in places (incorporated or unincorporated) of 2,500 inhabitants or more.
- 2/ 1982 Census of Agriculture.
- 3/ Trees -- Alabama's No. 1 Money Crop in 1982, C. W. McKee, Alabama Cooperative Extension Service.
- 4/ Alabama Agricultural Statistics, 1982 Revised.

COUNTY NAME: Etowah

LAND USE, 1982

----- Nonfederal Rural Land -----										
Cropland	Pasture- land	Forest- land	Minor Uses	Total Nonfederal Rural Land	Urban & Built-up	Rural Trans- portation	Federal Land	Census Water	Small water	Total Surface Area (Census)
					1000 Acs.					
44.3	44.9	200.5	10.4	300.1	32.2	8.7	0.0	5.4	6.1	352.5

Source: 1982 NRI, adjusted by inter-agency county and state workgroups.

SHEET AND RILL EROSION BY LAND USE, 1982  
RURAL NONFEDERAL LAND

	Area (1000 Acs.)	Average Erosion Rate (Tons/Acre/Year)	Total Erosion (Tons/Year)	Area Eroding At <= T	Area Eroding At > T -- 2T (1,000 Acres)	Area Eroding At > 2T
Cropland-All	44.3	7.9	349.9	16.1	12.2	16.0
Row Crops	27.7	8.7	241.3	8.0	8.4	11.3
Pastureland	44.9	.6	24.8	43.9	.5	.6
Forest Land	200.5	.5	91.7	195.9	2.8	1.8
Minor Uses	10.4	67.9	705.9	7.2	.3	2.9
Total	300.1	3.9	1,172.3	263.1	15.8	21.3

Source: 1982 NRI, adjusted by SCS county personnel and state workgroup.

RURAL NONFEDERAL LAND NEEDING CONSERVATION TREATMENT BY LAND USE, 1982

	Cropland	Pastureland	Forest
----- 1,000 acres -----			
Area Needing Treatment			
For: Erosion Control	30.1	0.1	1.0
Other	2.1	21.4	137.8
Percent Adequately Protected	27	52	27
Percent Needing Treatment	73	48	70
Percent Not Feasible to Treat	0	0	3

Source: 1982 NRI, adjusted by SCS county personnel and state workgroup.

FLOOD PLAIN LAND USE & AGRICULTURAL FLOOD DAMAGES, 1982

County Area	Floodplain Type	Flood Plain Land Use Acres -----							Average Annual Flood Damages			Number of Sub-W/S In County
		Total	Cropland	Pastureland	Forestland	Urban	Other	Water	Total \$	Cropland \$	Pasture- land \$	
	Tributary	20,871	305	5,728	13,780	826	102	130	26,100	8,900	17,200	-
	Riverine	17,474	2,427	1,059	7,118	303	0	6,567	93,900	90,700	3,200	-
	Total	38,345	2,732	6,787	20,898	1,129	102	6,697	120,000	99,600	20,400	20

Source: Flood plain land use, USDA-SCS, Auburn, AL.



FAYETTE COUNTY, ALABAMA  
1982 Resource Data

Fayette County's population is predominantly rural. Its nonfederal rural land area is distributed as follows: 10 percent cropland, 9 percent pastureland, 78 percent forest land, and 3 percent in minor uses. Soybeans is the principal crop grown. The county ranks 53rd in the state in the value of crop sales, 59th in livestock and poultry sales, and 37th in timber sales. The average sheet and rill erosion rate on cropland, 8.5 tons per acre per year, is 20 percent above the state average. Approximately 75 percent of the cropland needs conservation treatment.

	Population, 1960-1980 1/		
	1960	1970	1980
Rural	11,917	11,545	13,395
Urban	4,231	4,707	5,414
Total	16,148	16,252	18,809

		Major Crops 1982	Acres Harvested 1982 4/
Number of Farms, 1982 2/	419	Soybeans	19,000
Avg. Size of Farms, 1982 2/ (Ac.)	174	Wheat	5,300
Value of Sales, 1982: (Thou. Dollars)		Hay	4,000
Crops 2/	1,905	Corn	2,200
Livestock and Poultry 2/	3,756	Cotton	1,680
Timber Sold 3/	5,440		

- 1/ U.S. Census of Population--Urban population consists of all persons living in places (incorporated or unincorporated) of 2,500 inhabitants or more.
- 2/ 1982 Census of Agriculture.
- 3/ Trees -- Alabama's No. 1 Money Crop in 1982, C. W. McKee, Alabama Cooperative Extension Service.
- 4/ Alabama Agricultural Statistics, 1982 Revised.

COUNTY NAME: Fayette

LAND USE, 1982

----- Nonfederal Rural Land -----										
Cropland	Pasture- land	Forest- land	Minor Uses	Total Nonfederal Rural Land	Urban & Built-up 1000 Acs.	Rural Trans- portation	Federal Land	Census Water	Small Water	Total Surface Area (Census)
40.1	36.8	302.6	13.2	392.7	2.3	6.0	0.0	0.2	1.8	403.0

Source: 1982 NRI, adjusted by inter-agency county and state workgroups.

SHEET AND RILL EROSION BY LAND USE, 1982  
RURAL NONFEDERAL LAND

	Area (1000 Acs.)	Average Erosion Rate (Tons/Acre/Year)	Total Erosion (Tons/Year)	Area Eroding At <= T	Area Eroding At > T -- 2T (1,000 Acres)	Area Eroding At > 2T
Cropland-All	40.1	8.5	340.4	15.1	10.4	14.6
Row Crops	35.4	9.8	334.1 <sup>1/</sup>	10.3	11.2	13.9
Pastureland	36.8	1.0	37.5	33.8	2.4	.6
Forest Land	302.6	.7	224.8	294.4	3.5	4.8
Minor Uses	13.2	65.4	862.6	8.2	1.5	3.5
Total	392.7	3.7	1,465.3	351.5	17.8	23.5

Source: 1982 NRI, adjusted by SCS county personnel and state workgroup.

<sup>1/</sup> Adjusted downward to reflect original relationship with erosion volume for all cropland.

RURAL NONFEDERAL LAND NEEDING CONSERVATION TREATMENT BY LAND USE, 1982

	Cropland	Pastureland	Forest
----- 1,000 acres -----			
Area Needing Treatment			
For: Erosion Control	29.0	1.1	2.5
Other	0.8	16.7	231.4
Percent Adequately Protected	25	51	22
Percent Needing Treatment	75	49	77
Percent Not Feasible to Treat	0	0	1

Source: 1982 NRI, adjusted by SCS county personnel and state workgroup.

FLOOD PLAIN LAND USE & AGRICULTURAL FLOOD DAMAGES, 1982

County Area	Floodplain Type	Flood Plain Land Use Acres -----							Average Annual Flood Damages			Number of Sub-W/S In County
		Total	Cropland	Pastureland	Forestland	Urban	Other	Water	Total \$	Cropland \$	Pasture- land \$	
	Tributary	22,167	3,379	3,039	15,081	452	128	88	112,900	103,800	9,100	-
	Riverine	20,139	3,017	1,265	15,701	67	89	0	90,600	86,800	3,800	-
	Total	42,306	6,396	4,304	30,782	519	217	88	203,500	190,600	12,900	17

Source: Flood plain land use, USDA-SCS, Auburn, AL.

FRANKLIN COUNTY, ALABAMA  
1982 Resource Data

Franklin County's population is predominantly rural. Its nonfederal rural land area is distributed as follows: 15 percent cropland, 13 percent pastureland, 68 percent forest land, and 4 percent in minor uses. Soybeans, hay, and wheat are the principal crops grown. The county ranks 50th in the state in the value of crop sales, 16th in livestock and poultry sales, and 56th in timber sales. It is one of the important broiler producing counties. The average sheet and rill erosion rate on cropland, 8.4 tons per acre per year, is 18 percent above the state average. Approximately 72 percent of the cropland needs conservation treatment.

	Population, 1960-1980 1/		
	<u>1960</u>	<u>1970</u>	<u>1980</u>
Rural	15,370	16,119	16,923
Urban	6,618	7,814	11,427
Total	21,988	23,933	28,350

		<u>Major Crops 1982</u>	<u>Acres Harvested 1982 4/</u>
Number of Farms, 1982 2/	896	Soybeans	18,300
Avg. Size of Farms, 1982 2/ (Ac.)	153	Hay	13,500
Value of Sales, 1982: (Thou. Dollars)		Wheat	10,300
Crops 2/	3,223	Corn	5,800
Livestock and Poultry 2/	18,303	Cotton	810
Timber Sold 3/	2,478		

- 1/ U.S. Census of Population--Urban population consists of all persons living in places (incorporated or unincorporated) of 2,500 inhabitants or more.
- 2/ 1982 Census of Agriculture.
- 3/ Trees -- Alabama's No. 1 Money Crop in 1982, C. W. McKee, Alabama Cooperative Extension Service.
- 4/ Alabama Agricultural Statistics, 1982 Revised.



COUNTY NAME: Franklin

LAND USE, 1982

----- Nonfederal Rural Land -----										
Cropland	Pasture- land	Forest- land	Minor Uses	Total Nonfederal Rural Land	Urban & Built-up	Rural Trans- portation	Federal Land	Census Water	Small Water	Total Surface Area (Census)
					1000 Acs.					
57.6	50.4	255.1	15.2	378.3	9.5	11.0	1.8	10.3	3.1	414.0

Source: 1982 NRI, adjusted by inter-agency county and state workgroups.

SHEET AND RILL EROSION BY LAND USE, 1982  
RURAL NONFEDERAL LAND

	Area (1000 Acs.)	Average Erosion Rate (Tons/Acre/Year)	Total Erosion (Tons/Year)	Area Eroding At $\leq T$	Area Eroding At $> T$ -- $2T$	Area Eroding At $> 2T$
Cropland-All	57.6	8.4	483.9	24.8	16.1	16.7
Row Crops	53.3	9.4	456.6 <sup>1/</sup>	17.7	17.7	17.1
Pastureland	50.4	1.1	55.5	46.5	3.3	.6
Forest Land	255.1	.7	171.7	249.2	2.5	3.4
Minor Uses	15.2	46.7	709.9	9.6	1.8	3.7
Total	378.3	3.8	1,420.9	330.1	23.7	24.4

Source: 1982 NRI, adjusted by SCS county personnel and state workgroup.

<sup>1/</sup> Adjusted downward to reflect original relationship with erosion volume for all cropland.

RURAL NONFEDERAL LAND NEEDING CONSERVATION TREATMENT BY LAND USE, 1982

	Cropland	Pastureland	Forest
----- 1,000 acres -----			
Area Needing Treatment			
For: Erosion Control	39.2	1.9	2.2
Other	2.1	22.4	193.1
Percent Adequately Protected	28	52	23
Percent Needing Treatment	72	48	76
Percent Not Feasible to Treat	0	0	1

Source: 1982 NRI, adjusted by SCS county personnel and state workgroup.

FLOOD PLAIN LAND USE & AGRICULTURAL FLOOD DAMAGES, 1982

County Area	Floodplain Type	Flood Plain Land Use Acres							Average Annual Flood Damages			Number of Sub-W/S In County
		Total	Cropland	Pastureland	Forestland	Urban	Other	Water	Total \$	Cropland \$	Pasture- land \$	
	Tributary	33,129	7,248	5,506	9,272	141	86	10,876	233,000	216,500	16,500	-
	Riverine	0	0	0	0	0	0	0	0	0	0	-
	Total	33,129	7,248	5,506	9,272	141	86	10,876	233,000	216,500	16,500	11

Source: Flood plain land use, USDA-SCS, Auburn, AL.

GENEVA COUNTY, ALABAMA  
1982 Resource Data

Geneva County's population is predominantly rural. Its nonfederal rural land area is distributed as follows: 47 percent cropland, 14 percent pastureland, 37 percent forest land, and 2 percent in minor uses. Soybeans, corn, peanuts, and wheat are the principal crops grown. The county ranks 7th in the state in the value of crop sales, 11th in livestock and poultry sales, and 63rd in timber sales. It is an important county in the production of tomatoes, hogs and pecans. The average sheet and rill erosion rate on cropland, 6.9 tons per acre per year, is 3 percent below the state average. Approximately 60 percent of the cropland needs conservation treatment.

	Population, 1960-1980 1/		
	1960	1970	1980
Rural	18,473	14,878	16,740
Urban	3,837	7,046	7,513
Total	22,310	21,924	24,253

	Major Crops 1982	Acres Harvested 1982 4/
Number of Farms, 1982 2/		940
Avg. Size of Farms, 1982 2/ (Ac.)		230
Value of Sales, 1982: (Thou.Dollars)		
Crops 2/		22,893
Livestock and Poultry 2/		21,216
Timber Sold 3/		1,398
	Soybeans	59,300
	Corn	19,700
	Peanuts	17,300
	Wheat	13,600
	Hay	8,100
	G. Sorghum	1,000
	Cotton	230

- 1/ U.S. Census of Population--Urban population consists of all persons living in places (incorporated or unincorporated) of 2,500 inhabitants or more.
- 2/ 1982 Census of Agriculture.
- 3/ Trees -- Alabama's No. 1 Money Crop in 1982, C. W. McKee, Alabama Cooperative Extension Service.
- 4/ Alabama Agricultural Statistics, 1982 Revised.

COUNTY NAME: Geneva

LAND USE, 1982

----- Nonfederal Rural Land -----										
Cropland	Pasture- land	Forest- land	Minor Uses	Total Nonfederal Rural Land	Urban & Built-up 1000 Acs.	Rural Trans- portation	Federal Land	Census Water	Small Water	Total Surface Area (Census)
163.5	49.1	131.9	7.0	351.5	6.2	7.9	0.2	0.5	4.0	370.3

Source: 1982 NRI, adjusted by inter-agency county and state workgroups.

SHEET AND RILL EROSION BY LAND USE, 1982  
RURAL NONFEDERAL LAND

	Area (1000 Acs.)	Average Erosion Rate (Tons/Acre/Year)	Total Erosion (Tons/Year)	Area Eroding At <= T	Area Eroding At > T -- 2T (1,000 Acres)	Area Eroding At > 2T
Cropland-All	163.5	6.9	1,121.3	76.8	52.1	34.6
Row Crops	146.3	7.4	1,076.6	62.0	51.4	32.8
Pastureland	49.1	.5	24.4	48.8	.1	.2
Forest Land	131.9	.4	55.3	118.3	1.4	12.1
Minor Uses	7.0	7.9	55.1	1.4	5.1	.6
Total	351.5	3.6	1,256.1	245.3	58.7	47.5

Source: 1982 NRI, adjusted by SCS county personnel and state workgroup.

RURAL NONFEDERAL LAND NEEDING CONSERVATION TREATMENT BY LAND USE, 1982

	Cropland	Pastureland	Forest
----- 1,000 acres -----			
Area Needing Treatment			
For: Erosion Control	96.2	0.9	2.2
Other	1.7	18.8	61.4
Percent Adequately Protected	40	60	52
Percent Needing Treatment	60	40	48
Percent Not Feasible to Treat	0	0	0

Source: 1982 NRI, adjusted by SCS county personnel and state workgroup.

FLOOD PLAIN LAND USE & AGRICULTURAL FLOOD DAMAGES, 1982

County Area	Floodplain Type	Flood Plain Land Use Acres -----							Average Annual Flood Damages			Number of Sub-W/S In County
		Total	Cropland	Pastureland	Forestland	Urban	Other	Water	Total \$	Cropland \$	Pasture- land \$	
	Tributary	36,779	209	342	36,180	48	0	0	8,500	7,500	1,000	-
	Riverine	27,374	2,095	1,315	23,914	50	0	0	62,600	58,600	4,000	-
	Total	64,153	2,304	1,657	60,094	98	0	0	71,100	66,100	5,000	16

Source: Flood plain land use, USDA-SCS, Auburn, AL.



GREENE COUNTY, ALABAMA  
1982 Resource Data

Greene County's population is predominantly rural. Its nonfederal rural land area is distributed as follows: 12 percent cropland, 23 percent pastureland, 64 percent forest land, and 1 percent in minor uses. Soybeans and wheat are the principal crops grown. The county ranks 45th in the state in the value of crop sales, 40th in livestock and poultry sales, and 32nd in timber sales. It is one of the leading counties in commercial catfish production. The average sheet and rill erosion rate on cropland, 6.4 tons per acre per year, is 10 percent below the state average. Approximately 64 percent of the cropland needs conservation treatment.

	Population, 1960-1980 1/		
	1960	1970	1980
Rural	10,812	7,845	11,021
Urban	2,788	2,805	0
Total	13,600	10,650	11,021

		Major Crops 1982	Acres Harvested 1982 4/
Number of Farms, 1982 2/	390	Soybeans	24,000
Avg. Size of Farms, 1982 2/ (Ac.)	431	Wheat	12,900
Value of Sales, 1982: (Thou. Dollars)		Hay	5,600
Crops 2/	3,965	Corn	1,900
Livestock and Poultry 2/	8,775	Cotton	1,110
Timber Sold 3/	6,281		

- 1/ U.S. Census of Population--Urban population consists of all persons living in places (incorporated or unincorporated) of 2,500 inhabitants or more.
- 2/ 1982 Census of Agriculture.
- 3/ Trees -- Alabama's No. 1 Money Crop in 1982, C. W. McKee, Alabama Cooperative Extension Service.
- 4/ Alabama Agricultural Statistics, 1982 Revised.

COUNTY NAME: Greene

LAND USE, 1982

----- Nonfederal Rural Land -----										
Cropland	Pasture- land	Forest- land	Minor Uses	Total Nonfederal Rural Land	Urban & Built-up	Rural Trans- portation	Federal Land	Census Water	Small Water	Total Surface Area (Census)
					1000 Acs.					
45.3	86.0	246.2	2.2	379.7	5.1	6.6	4.8	18.9	7.5	422.6

Source: 1982 NRI, adjusted by inter-agency county and state workgroups.

SHEET AND RILL EROSION BY LAND USE, 1982  
RURAL NONFEDERAL LAND

	Area (1000 Acs.)	Average Erosion Rate (Tons/Acre/Year)	Total Erosion (Tons/Year)	Area Eroding At <= T	Area Eroding At > T -- 2T (1,000 Acres)	Area Eroding At > 2T
Cropland-All	45.3	6.4	291.0	21.8	12.5	11.1
Row Crops	34.1	7.4	253.2	12.8	11.6	9.7
Pastureland	86.0	.7	61.4	82.1	2.6	1.2
Forest Land	246.2	.8	186.5	241.1	.9	4.2
Minor Uses	2.2	13.8	30.5	1.8	.1	.2
Total	379.7	1.5	569.4	346.8	16.1	16.7

Source: 1982 NRI, adjusted by SCS county personnel and state workgroup.

RURAL NONFEDERAL LAND NEEDING CONSERVATION TREATMENT BY LAND USE, 1982

	Cropland	Pastureland	Forest
----- 1,000 acres -----			
Area Needing Treatment			
For: Erosion Control	27.3	5.3	5.0
Other	1.9	37.2	138.9
Percent Adequately Protected	36	50	41
Percent Needing Treatment	64	50	58
Percent Not Feasible to Treat	0	0	1

Source: 1982 NRI, adjusted by SCS county personnel and state workgroup.

FLOOD PLAIN LAND USE & AGRICULTURAL FLOOD DAMAGES, 1982

County Area	Floodplain Type	Flood Plain Land Use Acres -----							Average Annual Flood Damages			Number of Sub-W/S In County
		Total	Cropland	Pastureland	Forestland	Urban	Other	Water	Total \$	Cropland \$	Pasture- land \$	
	Tributary	27,352	1,575	3,174	22,273	0	330	0	53,900	44,400	9,500	-
	Riverine	116,141	6,162	2,552	96,870	110	360	10,087	196,700	189,000	7,700	-
	Total	143,493	7,737	5,726	119,143	110	690	10,087	250,600	233,400	17,200	10

Source: Flood plain land use, USDA-SCS, Auburn, AL.

HALE COUNTY, ALABAMA  
1982 Resource Data

Hale County's population is predominantly rural. Its nonfederal rural land area is distributed as follows: 22 percent cropland, 21 percent pastureland, 56 percent forest land, and 1 percent in minor uses. Soybeans is the principal crop grown. The county ranks 36th in the state in the value of crop sales, 27th in livestock and poultry sales, and 45th in timber sales. It is the leader in commercial catfish production and one of the leaders in milk production. The average sheet and rill erosion rate on cropland, 6.7 tons per acre per year, is 6 percent below the state average. Approximately 69 percent of the cropland needs conservation treatment.

	Population, 1960-1980 1/		
	1960	1970	1980
Rural	16,450	12,517	12,356
Urban	3,087	3,371	3,248
Total	19,537	15,888	15,604

		Major Crops 1982	Acres Harvested 1982 4/
Number of Farms, 1982 2/	481	Soybeans	59,500
Avg. Size of Farms, 1982 2/ (Ac.)	373	Hay	18,500
Value of Sales, 1982: (Thou. Dollars)		Wheat	12,000
Crops 2/	5,919	Corn	3,500
Livestock and Poultry 2/	12,917	Cotton	1,440
Timber Sold 3/	3,694	G. Sorghum	800

- 1/ U.S. Census of Population--Urban population consists of all persons living in places (incorporated or unincorporated) of 2,500 inhabitants or more.
- 2/ 1982 Census of Agriculture.
- 3/ Trees -- Alabama's No. 1 Money Crop in 1982, C. W. McKee, Alabama Cooperative Extension Service.
- 4/ Alabama Agricultural Statistics, 1982 Revised.



COUNTY NAME: Hale

LAND USE, 1982

----- Nonfederal Rural Land -----										
Cropland	Pasture- land	Forest- land	Minor Uses	Total Nonfederal Rural Land	Urban & Built-up 1000 Acs.	Rural Trans- portation	Federal Land	Census Water	Small Water	Total Surface Area (Census)
81.5	79.6	210.0	2.9	374.0	4.5	7.2	30.8	1.3	5.9	423.7

Source: 1982 NRI, adjusted by inter-agency county and state workgroups.

SHEET AND RILL EROSION BY LAND USE, 1982  
RURAL NONFEDERAL LAND

	Area (1000 Acs.)	Average Erosion Rate (Tons/Acre/Year)	Total Erosion (Tons/Year)	Area Eroding At <= T	Area Eroding At > T -- 2T (1,000 Acres)	Area Eroding At > 2T
Cropland-All	81.5	6.7	542.6	35.9	23.2	22.3
Row Crops	63.2	7.6	479.2	22.1	21.7	19.5
Pastureland	79.6	.7	58.2	75.8	2.6	1.2
Forest Land	210.0	.8	161.4	205.5	.8	3.7
Minor Uses	2.9	13.6	39.5	2.5	.1	.3
Total	374.0	2.1	801.7	319.7	26.7	27.5

Source: 1982 NRI, adjusted by SCS county personnel and state workgroup.

RURAL NONFEDERAL LAND NEEDING CONSERVATION TREATMENT BY LAND USE, 1982

	Cropland	Pastureland	Forest
----- 1,000 acres -----			
Area Needing Treatment			
For: Erosion Control	52.8	5.3	4.4
Other	3.4	35.4	123.2
Percent Adequately Protected	31	49	39
Percent Needing Treatment	69	51	60
Percent Not Feasible to Treat	0	0	1

Source: 1982 NRI, adjusted by SCS county personnel and state workgroup.

FLOOD PLAIN LAND USE & AGRICULTURAL FLOOD DAMAGES, 1982

County Area	Floodplain Type	Flood Plain Land Use Acres -----							Average Annual Flood Damages			Number of Sub-W/S In County
		Total	Cropland	Pastureland	Forestland	Urban	Other	Water	Total \$	Cropland \$	Pasture- land \$	
	Tributary	62,382	10,897	12,146	37,540	140	830	829	341,600	305,200	36,400	-
	Riverine	64,765	5,613	1,618	51,332	141	318	5,743	178,800	173,900	4,900	-
	Total	127,147	16,510	13,764	88,872	281	1,148	6,572	520,400	479,100	41,300	13

Source: Flood plain land use, USDA-SCS, Auburn, AL.

HENRY COUNTY, ALABAMA  
1982 Resource Data

Henry County's population is predominantly rural. Its nonfederal rural land area is distributed as follows: 29 percent cropland, 12 percent pastureland, 58 percent forest land, and 1 percent in minor uses. Peanuts, corn, and soybeans are the principal crops grown. The county ranks 6th in the state in the value of crop sales, 50th in livestock and poultry sales, and 25th in timber sales. It is important in hog production. The average sheet and rill erosion rate on cropland, 6.9 tons per acre per year, is 3 percent below the state average. Approximately 60 percent of the cropland needs conservation treatment.

	Population, 1960-1980 <sup>1/</sup>		
	<u>1960</u>	<u>1970</u>	<u>1980</u>
Rural	10,119	7,713	8,820
Urban	5,167	5,541	6,482
Total	15,286	13,254	15,302

		<u>Major Crops 1982</u>	<u>Acres Harvested 1982 <sup>4/</sup></u>
Number of Farms, 1982 <sup>2/</sup>	475	Peanuts	30,300
Avg. Size of Farms, 1982 <sup>2/</sup> (Ac.)	410	Corn	24,600
Value of Sales, 1982: (Thou. Dollars)		Soybeans	23,400
Crops <sup>2/</sup>	26,816	Wheat	12,100
Livestock and Poultry <sup>2/</sup>	6,171	Hay	7,800
Timber Sold <sup>3/</sup>	7,551	Cotton	3,850
		G. Sorghum	3,000

- <sup>1/</sup> U.S. Census of Population--Urban population consists of all persons living in places (incorporated or unincorporated) of 2,500 inhabitants or more.
- <sup>2/</sup> 1982 Census of Agriculture.
- <sup>3/</sup> Trees -- Alabama's No. 1 Money Crop in 1982, C. W. McKee, Alabama Cooperative Extension Service.
- <sup>4/</sup> Alabama Agricultural Statistics, 1982 Revised.

COUNTY NAME: Henry

LAND USE, 1982

----- Nonfederal Rural Land -----										
Cropland	Pasture- land	Forest- land	Minor Uses	Total Nonfederal Rural Land	Urban & Built-up 1000 Acs.	Rural Trans- portation	Federal Land	Census Water	Small Water	Total Surface Area (Census)
97.4	40.5	200.0	2.7	340.6	4.7	6.6	1.2	7.3	3.1	363.5

Source: 1982 NRI, adjusted by inter-agency county and state workgroups.

SHEET AND RILL EROSION BY LAND USE, 1982  
RURAL NONFEDERAL LAND

	Area (1000 Acs.)	Average Erosion Rate (Tons/Acre/Year)	Total Erosion (Tons/Year)	Area Eroding At <= T	Area Eroding At > T -- 2T (1,000 Acres)	Area Eroding At > 2T
Cropland-All	97.4	6.9	668.0	45.8	31.0	20.6
Row Crops	82.2	7.4	604.9	34.8	28.9	18.5
Pastureland	40.5	.5	20.1	40.2	.1	.2
Forest Land	200.0	.4	83.8	195.9	2.2	1.8
Minor Uses	2.7	7.9	21.3	2.3	.2	.2
Total	340.6	2.3	793.2	284.2	33.5	22.8

Source: 1982 NRI, adjusted by SCS county personnel and state workgroup.

RURAL NONFEDERAL LAND NEEDING CONSERVATION TREATMENT BY LAND USE, 1982

	Cropland	Pastureland	Forest
----- 1,000 acres -----			
Area Needing Treatment For: Erosion Control	57.3	0.8	3.4
Other	1.0	15.5	93.1
Percent Adequately Protected	40	60	52
Percent Needing Treatment	60	40	48
Percent Not Feasible to Treat	0	0	0

Source: 1982 NRI, adjusted by SCS county personnel and state workgroup.

FLOOD PLAIN LAND USE & AGRICULTURAL FLOOD DAMAGES, 1982

County Area	Floodplain Type	Flood Plain Land Use Acres -----							Average Annual Flood Damages			Number of Sub-W/S in County
		Total	Cropland	Pastureland	Forestland	Urban	Other	Water	Total \$	Cropland \$	Pasture- land \$	
	Tributary	36,263	464	374	35,420	0	5	0	23,800	22,700	1,100	-
	Riverine	10,592	1,935	427	4,108	0	388	3,724	84,700	83,400	1,300	-
	Total	46,855	2,399	811	39,528	0	393	3,724	108,500	106,100	2,400	10

Source: Flood plain land use, USDA-SCS, Auburn, AL.



HOUSTON COUNTY, ALABAMA  
1982 Resource Data

Houston County's population is predominantly urban. Its nonfederal rural land area is distributed as follows: 42 percent cropland, 27 percent pastureland, 29 percent forest land, and 2 percent in minor uses. Soybeans, peanuts and corn are the principal crops grown. The county ranks 5th in the state in the value of crop sales, 32nd in livestock and poultry sales, and 57th in timber sales. It is an important county in hog production. The average sheet and rill erosion rate on cropland, 6.9 tons per acre per year, is 3 percent below the state average. Approximately 60 percent of the cropland needs conservation treatment.

	Population, 1960-1980 1/		
	1960	1970	1980
Rural	19,273	19,841	25,591
Urban	31,445	36,733	49,041
Total	50,718	56,574	74,632

		Major Crops 1982	Acres Harvested 1982 4/
Number of Farms, 1982 2/	955	Soybeans	52,900
Avg. Size of Farms, 1982 2/ (Ac.)	213	Peanuts	30,000
Value of Sales, 1982: (Thou. Dollars)		Corn	23,500
Crops 2/	27,998	Wheat	11,900
Livestock and Poultry 2/	10,882	G. Sorghum	4,400
Timber Sold 3/	2,264	Hay	3,200
		Cotton	1,200

- 1/ U.S. Census of Population--Urban population consists of all persons living in places (incorporated or unincorporated) of 2,500 inhabitants or more.
- 2/ 1982 Census of Agriculture.
- 3/ Trees -- Alabama's No. 1 Money Crop in 1982, C. W. McKee, Alabama Cooperative Extension Service.
- 4/ Alabama Agricultural Statistics, 1982 Revised.

COUNTY NAME: Houston

LAND USE, 1982

----- Nonfederal Rural Land -----										
Cropland	Pasture- land	Forest- land	Minor Uses	Total Nonfederal Rural Land	Urban & Built-up	Rural Trans- portation	Federal Land	Census Water	Small Water	Total Surface Area (Census)
					1000 Acs.					
143.2	90.6	97.7	7.2	338.7	17.4	9.5	0.2	2.8	3.4	372.0

Source: 1982 NRI, adjusted by inter-agency county and state workgroups.

SHEET AND RILL EROSION BY LAND USE, 1982  
RURAL NONFEDERAL LAND

	Area (1000 Acs.)	Average Erosion Rate (Tons/Acre/Year)	Total Erosion (Tons/Year)	Area Eroding At <= T	Area Eroding At > T -- 2T	Area Eroding At > 2T
Cropland-All	143.2	6.9	982.1	67.3	45.6	30.3
Row Crops	126.7	7.4	932.4	53.7	44.5	28.5
Pastureland	90.6	.5	45.0	89.9	.2	.4
Forest Land	97.7	.4	40.9	95.7	1.1	.9
Minor Uses	7.2	7.8	56.7	6.1	.5	.6
Total	338.7	3.3	1,124.7	259.0	47.4	32.2

Source: 1982 NRI, adjusted by SCS county personnel and state workgroup.

RURAL NONFEDERAL LAND NEEDING CONSERVATION TREATMENT BY LAND USE, 1982

	Cropland	Pastureland	Forest
----- 1,000 acres -----			
Area Needing Treatment			
For: Erosion Control	84.2	1.7	1.7
Other	1.5	34.7	45.5
Percent Adequately Protected	40	60	52
Percent Needing Treatment	60	40	48
Percent Not Feasible to Treat	0	0	0

Source: 1982 NRI, adjusted by SCS county personnel and state workgroup.

FLOOD PLAIN LAND USE & AGRICULTURAL FLOOD DAMAGES, 1982

County Area	Floodplain Type	Flood Plain Land Use Acres							Average Annual Flood Damages			Number of Sub-W/S In County
		Total	Cropland	Pastureland	Forestland	Urban	Other	Water	Total \$	Cropland \$	Pasture- land \$	
	Tributary	52,284	439	1,198	50,495	152	0	0	20,700	17,100	3,600	-
	Riverine	12,806	829	3,328	8,216	400	33	0	42,300	32,300	10,000	-
	Total	65,090	1,268	4,526	58,711	552	33	0	63,000	49,400	13,600	8

Source: Flood plain land use, USDA-SCS, Auburn, AL.

JACKSON COUNTY, ALABAMA  
1982 Resource Data

Jackson County's population is predominantly rural. Its nonfederal rural land area is distributed as follows: 21 percent cropland, 12 percent pastureland, 65 percent forest land, and 2 percent in minor uses. Soybeans is the principal crop grown. The county ranks 19th in the state in the value of crop sales, 17th in livestock and poultry sales, and 62nd in timber sales. It is one of the leading counties in Irish potato production. The average sheet and rill erosion rate on cropland, 8.0 tons per acre per year, is 12 percent above the state average. Approximately 74 percent of the cropland needs conservation treatment.

	Population, 1960-1980 1/		
	1960	1970	1980
Rural	27,327	26,970	31,107
Urban	9,354	12,232	20,300
Total	36,681	39,202	51,407

		Major Crops 1982	Acres Harvested 1982 4/
Number of Farms, 1982 2/	1,295	Soybeans	78,200
Avg. Size of Farms, 1982 2/ (Ac.)	175	Corn	23,100
Value of Sales, 1982: (Thou.Dollars)		Wheat	15,700
Crops 2/	13,110	Hay	15,200
Livestock and Poultry 2/	18,014	G. Sorghum	2,200
Timber Sold 3/	1,826		

- 1/ U.S. Census of Population--Urban population consists of all persons living in places (incorporated or unincorporated) of 2,500 inhabitants or more.
- 2/ 1982 Census of Agriculture.
- 3/ Trees -- Alabama's No. 1 Money Crop in 1982, C. W. McKee, Alabama Cooperative Extension Service.
- 4/ Alabama Agricultural Statistics, 1982 Revised.



COUNTY NAME: Jackson

LAND USE, 1982

----- Nonfederal Rural Land -----										
Cropland	Pasture- land	Forest- land	Minor Uses	Total Nonfederal Rural Land	Urban & Built-up 1000 Acs.	Rural Trans- portation	Federal Land	Census Water	Small Water	Total Surface Area (Census)
138.5	80.3	427.5	16.0	662.3	7.2	11.3	0.9	36.5	3.2	721.4

Source: 1982 NRI, adjusted by inter-agency county and state workgroups.

SHEET AND RILL EROSION BY LAND USE, 1982  
RURAL NONFEDERAL LAND

	Area (1000 Acs.)	Average Erosion Rate (Tons/Acre/Year)	Total Erosion (Tons/Year)	Area Eroding At <= T	Area Eroding At > T -- 2T (1,000 Acres)	Area Eroding At > 2T
Cropland-All	138.5	8.0	1,102.7	46.3	36.4	55.8
Row Crops	121.7	8.9	1,082.6	30.9	34.9	55.9
Pastureland	80.3	.6	46.8	77.9	1.2	1.2
Forest Land	427.5	.5	217.0	417.0	6.1	4.4
Minor Uses	16.0	83.2	1,331.2	10.3	.6	5.2
Total	662.3	4.1	2697.7	551.5	44.2	66.5

Source: 1982 NRI, adjusted by SCS county personnel and state workgroup.

RURAL NONFEDERAL LAND NEEDING CONSERVATION TREATMENT BY LAND USE, 1982

	Cropland	Pastureland	Forest
----- 1,000 acres -----			
Area Needing Treatment			
For: Erosion Control	97.8	0.3	2.3
Other	5.3	38.3	298.0
Percent Adequately Protected	26	52	26
Percent Needing Treatment	74	48	71
Percent Not Feasible to Treat	0	0	3

Source: 1982 NRI, adjusted by SCS county personnel and state workgroup.

FLOOD PLAIN LAND USE & AGRICULTURAL FLOOD DAMAGES, 1982

County Area	Floodplain Type	Flood Plain Land Use Acres -----							Average Annual Flood Damages			Number of Sub-W/S In County
		Total	Cropland	Pastureland	Forestland	Urban	Other	Water	Total \$	Cropland \$	Pasture- land \$	
	Tributary	55,485	25,409	3,637	25,860	564	11	4	732,900	722,000	10,900	-
	Riverine	53,088	9,918	1,830	9,298	0	20	32,022	287,600	282,100	5,500	-
	Total	108,573	35,327	5,467	35,158	564	31	32,026	1,020,500	1,004,100	16,400	28

Source: Flood plain land use, USDA-SCS, Auburn, AL.

JEFFERSON COUNTY, ALABAMA  
1982 Resource Data

Jefferson County's population is predominantly urban. Its nonfederal rural land area is distributed as follows: 2 percent cropland, 6 percent pastureland, 85 percent forest land, and 7 percent in minor uses. Hay is the principal crop grown. The county ranks 55th in the state in the value of crop sales, 14th in livestock and poultry sales, and 29th in timber sales. It is an important broiler-producing county. The average sheet and rill erosion rate on cropland, 8.0 tons per acre per year, is 12 percent above the state average. Approximately 75 percent of the cropland needs conservation treatment.

	Population, 1960-1980 1/		
	<u>1960</u>	<u>1970</u>	<u>1980</u>
Rural	97,769	74,589	70,863
Urban	537,095	570,402	600,461
Total	634,864	644,991	671,324

	Major Crops <u>1982</u>	Acres Harvested <u>1982 4/</u>
Number of Farms, 1982 <u>2/</u>		
Avg. Size of Farms, 1982 <u>2/</u> (Ac.)	Hay	4,600
Value of Sales, 1982: (Thou.Dollars)	Soybeans	700
Crops <u>2/</u>		
Livestock and Poultry <u>2/</u>		
Timber Sold <u>3/</u>		

- 1/ U.S. Census of Population--Urban population consists of all persons living in places (incorporated or unincorporated) of 2,500 inhabitants or more.
- 2/ 1982 Census of Agriculture.
- 3/ Trees -- Alabama's No. 1 Money Crop in 1982, C. W. McKee, Alabama Cooperative Extension Service.
- 4/ Alabama Agricultural Statistics, 1982 Revised.

COUNTY NAME: Jefferson

LAND USE, 1982

----- Nonfederal Rural Land -----										
Cropland	Pasture- Land	Forest- Land	Minor Uses	Total Nonfederal Rural Land	Urban & Built-up 1000 Acs.	Rural Trans- portation	Federal Land	Census Water	Small Water	Total Surface Area (Census)
12.8	34.1	449.4	36.1	532.4	152.4	21.5	0.0	3.6	10.0	719.9

Source: 1982 NRI, adjusted by inter-agency county and state workgroups.

SHEET AND RILL EROSION BY LAND USE, 1982  
RURAL NONFEDERAL LAND

	Area (1000 Acs.)	Average Erosion Rate (Tons/Acre/Year)	Total Erosion (Tons/Year)	Area Eroding At <= T	Area Eroding At > T -- 2T (1,000 Acres)	Area Eroding At > 2T
Cropland-All	12.8	8.0	102.1	4.2	3.3	5.3
Row Crops	9.3	9.1	84.7	2.0	2.5	4.8
Pastureland	34.1	.6	19.8	33.1	.5	.5
Forest Land	449.4	.7	326.1	434.9	6.9	7.6
Minor Uses	36.1	164.0	5,920.9	22.2	1.4	12.5
Total	532.4	12.0	6,368.9	494.4	12.1	25.9

Source: 1982 NRI, adjusted by SCS county personnel and state workgroup.

RURAL NONFEDERAL LAND NEEDING CONSERVATION TREATMENT BY LAND USE, 1982

	Cropland	Pastureland	Forest
----- 1,000 acres -----			
Area Needing Treatment			
For: Erosion Control	9.1	0.1	2.8
Other	0.4	16.3	332.7
Percent Adequately Protected	25	52	22
Percent Needing Treatment	75	48	75
Percent Not Feasible to Treat	0	0	3

Source: 1982 NRI, adjusted by SCS county personnel and state workgroup.

FLOOD PLAIN LAND USE & AGRICULTURAL FLOOD DAMAGES, 1982

County Area	Floodplain Type	Flood Plain Land Use Acres -----							Average Annual Flood Damages			Number of Sub-W/S in County
		Total	Cropland	Pastureland	Forestland	Urban	Other	Water	Total \$	Cropland \$	Pasture- land \$	
	Tributary	32,299	184	3,948	15,893	9,915	1,328	1,031	18,300	6,500	11,800	-
	Riverine	13,524	18	1,097	8,116	885	691	2,717	4,000	700	3,300	-
	Total	45,823	202	5,045	24,009	10,800	2,019	3,748	22,300	7,200	15,100	23

Source: Flood plain land use, USDA-SCS, Auburn, AL.



LAMAR COUNTY, ALABAMA  
1982 Resource Data

Lamar County's population is predominantly rural. Its nonfederal rural land area is distributed as follows: 5 percent cropland, 14 percent pastureland, 80 percent forest land, and 1 percent in minor uses. Soybeans is the principal crop grown. The county ranks 56th in the state in the value of crop sales, 62nd in livestock and poultry sales, and 23rd in timber sales. The average sheet and rill erosion rate on cropland, 8.7 tons per acre per year, is 23 percent above the state average. Approximately 72 percent of the cropland needs conservation treatment.

	Population, 1960-1980 1/		
	1960	1970	1980
Rural	14,271	14,335	13,844
Urban	0	0	2,609
Total	14,271	14,335	16,453

		Major Crops 1982	Acres Harvested 1982 4/
Number of Farms, 1982 2/	447	Soybeans	20,500
Avg. Size of Farms, 1982 2/ (Ac.)	162	Hay	5,100
Value of Sales, 1982: (Thou. Dollars)		Wheat	2,700
Crops 2/	1,584	Corn	1,700
Livestock and Poultry 2/	2,728	Cotton	890
Timber Sold 3/	7,878		

- 1/ U.S. Census of Population--Urban population consists of all persons living in places (incorporated or unincorporated) of 2,500 inhabitants or more.  
2/ 1982 Census of Agriculture.  
3/ Trees -- Alabama's No. 1 Money Crop in 1982, C. W. McKee, Alabama Cooperative Extension Service.  
4/ Alabama Agricultural Statistics, 1982 Revised.

COUNTY NAME: Lamar

LAND USE, 1982

----- Nonfederal Rural Land -----										
Cropland	Pasture- land	Forest- land	Minor Uses	Total Nonfederal Rural Land	Urban & Built-up 1000 Acs.	Rural Trans- portation	Federal Land	Census Water	Small Water	Total Surface Area (Census)
20.1	53.0	295.4	3.4	371.9	5.8	7.1	0.0	0.2	2.3	387.3

Source: 1982 NRI, adjusted by inter-agency county and state workgroups.

SHEET AND RILL EROSION BY LAND USE, 1982  
RURAL NONFEDERAL LAND

	Area (1000 Acs.)	Average Erosion Rate (Tons/Acre/Year)	Total Erosion (Tons/Year)	Area Eroding At <= T	Area Eroding At > T -- 2T (1,000 Acres)	Area Eroding At > 2T
Cropland-All	20.1	8.7	174.3	8.9	5.6	5.6
Row Crops	14.3	9.9	142.3	4.9	4.9	4.5
Pastureland	53.0	1.2	62.4	47.9	4.3	.7
Forest Land	295.4	.7	209.1	288.4	2.9	4.2
Minor Uses	3.4	47.6	161.9	2.1	.4	.8
Total	371.9	1.6	607.7	347.3	13.2	11.3

Source: 1982 NRI, adjusted by SCS county personnel and state workgroup.

RURAL NONFEDERAL LAND NEEDING CONSERVATION TREATMENT BY LAND USE, 1982

	Cropland	Pastureland	Forest
----- 1,000 acres -----			
Area Needing Treatment			
For: Erosion Control	13.9	2.3	2.7
Other	0.5	23.3	226.3
Percent Adequately Protected	28	52	22
Percent Needing Treatment	72	48	78
Percent Not Feasible to Treat	0	0	0

Source: 1982 NRI, adjusted by SCS county personnel and state workgroup.

FLOOD PLAIN LAND USE & AGRICULTURAL FLOOD DAMAGES, 1982

County Area	Floodplain Type	Flood Plain Land Use Acres -----							Average Annual Flood Damages			Number of Sub-W/S In County
		Total	Cropland	Pastureland	Forestland	Urban	Other	Water	Total \$	Cropland \$	Pasture- land \$	
	Tributary	57,571	2,419	3,462	51,301	333	56	0	82,200	71,800	10,400	-
	Riverine	14,789	2,310	129	12,306	0	44	0	66,500	66,100	400	-
	Total	72,360	4,729	3,591	63,607	333	100	0	148,700	137,900	10,800	9

Source: Flood plain land use, USOA-SCS, Auburn, AL.

LAUDERDALE COUNTY, ALABAMA  
1982 Resource Data

Lauderdale County's population is predominantly urban. Its nonfederal rural land area is distributed as follows: 35 percent cropland, 26 percent pastureland, 36 percent forest land, and 3 percent in minor uses. Soybeans, wheat, cotton, and hay are the principal crops grown. The county ranks 12th in the state in the value of crop sales, 34th in livestock and poultry sales, and 65th in timber sales. It is one of the leaders in beef cattle production and an important county in hog production. The average sheet and rill erosion rate on cropland, 9.2 tons per acre per year, is 30 percent above the state average. Approximately 79 percent of the cropland needs conservation treatment.

	Population, 1960-1980 1/		
	1960	1970	1980
Rural	29,948	34,038	38,062
Urban	31,674	34,073	42,484
Total	61,622	68,111	80,546

		Major Crops 1982	Acres Harvested 1982 4/
Number of Farms, 1982 2/	1,413	Soybeans	52,300
Avg. Size of Farms, 1982 2/ (Ac.)	151	Wheat	36,200
Value of Sales, 1982: (Thou. Dollars)		Cotton	21,600
Crops 2/	15,997	Hay	16,300
Livestock and Poultry 2/	10,011	Corn	8,500
Timber Sold 3/	1,226		

1/ U.S. Census of Population--Urban population consists of all persons living in places (incorporated or unincorporated) of 2,500 inhabitants or more.

2/ 1982 Census of Agriculture.

3/ Trees -- Alabama's No. 1 Money Crop in 1982, C. W. McKee, Alabama Cooperative Extension Service.

4/ Alabama Agricultural Statistics, 1982 Revised.



COUNTY NAME: Lauderdale

LAND USE, 1982

----- Nonfederal Rural Land -----										
Cropland	Pasture- land	Forest- land	Minor Uses	Total Nonfederal Rural Land	Urban & Built-up	Rural Trans- portation	Federal Land	Census Water	Small Water	Total Surface Area (Census)
					1000 Acs.					
137.4	99.3	140.7	11.4	388.8	19.3	11.7	1.4	36.8	2.1	460.1

Source: 1982 NRI, adjusted by inter-agency county and state workgroups.

SHEET AND RILL EROSION BY LAND USE, 1982  
RURAL NONFEDERAL LAND

	Area (1000 Acs.)	Average Erosion Rate (Tons/Acre/Year)	Total Erosion (Tons/Year)	Area Eroding At <= T	Area Eroding At > T -- 2T	Area Eroding At > 2T
Cropland-All	137.4	9.2	1,259.2	40.0	36.7	60.7
Row Crops	117.1	9.9	1,160.7	26.2	34.1	56.7
Pastureland	99.3	.6	61.4	98.4	.5	.3
Forest Land	140.7	.3	47.6	138.2	1.4	1.1
Minor Uses	11.4	12.1	138.4	9.5	.3	1.6
Total	388.8	3.9	1506.6	286.2	38.9	63.7

Source: 1982 NRI, adjusted by SCS county personnel and state workgroup.

RURAL NONFEDERAL LAND NEEDING CONSERVATION TREATMENT BY LAND USE, 1982

	Cropland	Pastureland	Forest
----- 1,000 acres -----			
Area Needing Treatment			
For: Erosion Control	100.5	1.9	0.4
Other	7.5	60.5	117.0
Percent Adequately Protected	21	37	15
Percent Needing Treatment	79	63	84
Percent Not Feasible to Treat	0	0	1

Source: 1982 NRI, adjusted by SCS county personnel and state workgroup.

FLOOD PLAIN LAND USE & AGRICULTURAL FLOOD DAMAGES, 1982

County Area	Floodplain Type	Flood Plain Land Use Acres -----							Average Annual Flood Damages			Number of Sub-W/S In County
		Total	Cropland	Pastureland	Forestland	Urban	Other	Water	Total \$	Cropland \$	Pasture- land \$	
	Tributary	34,989	12,183	11,220	10,120	486	883	97	413,600	379,900	33,700	-
	Riverine	36,498	802	0	1,748	427	137	33,384	23,700	23,700	0	-
	Total	71,487	12,985	11,220	11,868	913	1,020	33,481	437,300	403,600	33,700	15

Source: Flood plain land use, USDA-SCS, Auburn, AL.

LAWRENCE COUNTY, ALABAMA  
1982 Resource Data

Lawrence County's population is predominantly rural. Its nonfederal rural land area is distributed as follows: 42 percent cropland, 19 percent pastureland, 35 percent forest land, and 4 percent in minor uses. Soybeans, cotton, and hay are the principal crops grown. The county ranks 8th in the state in the value of crop sales, 9th in livestock and poultry sales, and 64th in timber sales. It is an important county in broiler and egg production. The average sheet and rill erosion rate on cropland, 7.9 tons per acre per year, is 11 percent above the state average. Approximately 73 percent of the cropland needs conservation treatment.

	Population, 1960-1980 1/		
	1960	1970	1980
Rural	24,501	27,281	26,973
Urban	0	0	3,197
Total	24,501	27,281	30,170

		Major Crops 1982	Acres Harvested 1982 4/
Number of Farms, 1982 2/	1,226	Soybeans	36,800
Avg. Size of Farms, 1982 2/ (Ac.)	164	Cotton	33,100
Value of Sales, 1982: (Thou. Dollars)		Hay	31,600
Crops 2/	20,953	Wheat	19,600
Livestock and Poultry 2/	30,491	Corn	3,100
Timber Sold 3/	1,376	G. Sorghum	1,500

1/ U.S. Census of Population--Urban population consists of all persons living in places (incorporated or unincorporated) of 2,500 inhabitants or more.

2/ 1982 Census of Agriculture.

3/ Trees -- Alabama's No. 1 Money Crop in 1982, C. W. McKee, Alabama Cooperative Extension Service.

4/ Alabama Agricultural Statistics, 1982 Revised.

COUNTY NAME: Lawrence

LAND USE, 1982

----- Nonfederal Rural Land -----										
Cropland	Pasture- land	Forest- land	Minor Uses	Total Nonfederal Rural Land	Urban & Built-up	Rural Trans- portation	Federal Land	Census Water	Small Water	Total Surface Area (Census)
					1000 Acs.					
141.7	64.5	115.9	14.8	336.9	4.2	11.5	89.3	15.6	1.8	459.3

Source: 1982 NRI, adjusted by inter-agency county and state workgroups.

SHEET AND RILL EROSION BY LAND USE, 1982  
RURAL NONFEDERAL LAND

	Area (1000 Acs.)	Average Erosion Rate (Tons/Acre/Year)	Total Erosion (Tons/Year)	Area Eroding At <= T	Area Eroding At >T -- 2T	Area Eroding At > 2T
Cropland-All	141.7	7.9	1,119.8	51.2	38.9	51.6
Row Crops	130.1	8.7	1,113.9 <sup>1/</sup>	37.6	39.3	53.2
Pastureland	64.5	.6	37.6	62.6	.9	.9
Forest Land	115.9	.4	49.7	113.3	1.6	.9
Minor Uses	14.8	76.0	1,506.6	10.2	.4	4.3
Total	336.9	8.1	2,713.7	237.3	41.8	57.7

Source: 1982 NRI, adjusted by SCS county personnel and state workgroup.

<sup>1/</sup> Adjusted downward to reflect original relationship with erosion volume for all cropland.

RURAL NONFEDERAL LAND NEEDING CONSERVATION TREATMENT BY LAND USE, 1982

	Cropland	Pastureland	Forest
----- 1,000 acres -----			
Area Needing Treatment			
For: Erosion Control	96.5	0.2	0.6
Other	6.7	30.8	79.0
Percent Adequately Protected	27	52	28
Percent Needing Treatment	73	48	69
Percent Not Feasible to Treat	0	0	3

Source: 1982 NRI, adjusted by SCS county personnel and state workgroup.

FLOOD PLAIN LAND USE & AGRICULTURAL FLOOD DAMAGES, 1982

County Area	Floodplain Type	Flood Plain Land Use Acres							Average Annual Flood Damages			Number of Sub-W/S In County
		Total	Cropland	Pastureland	Forestland	Urban	Other	Water	Total \$	Cropland \$	Pasture- land \$	
	Tributary	59,104	29,183	6,962	21,290	641	914	114	987,100	966,200	20,900	-
	Riverine	15,410	176	0	254	0	96	14,884	4,900	4,900	0	-
	Total	74,514	29,359	6,962	21,544	641	1,010	14,998	992,000	971,100	20,900	11

Source: Flood plain land use, USDA-SCS, Auburn, AL.



LEE COUNTY, ALABAMA  
1982 Resource Data

Lee County's population is predominantly urban. Its nonfederal rural land area is distributed as follows: 10 percent cropland, 19 percent pastureland, 68 percent forest land, and 3 percent in minor uses. Hay and cotton are the principal crops grown. The county ranks 40th in the state in the value of crop sales, 58th in livestock and poultry sales, and 27th in timber sales. The average sheet and rill erosion rate on cropland, 5.6 tons per acre per year, is 21 percent below the state average. Approximately 57 percent of the cropland needs conservation treatment.

	Population, 1960-1980 <sup>1/</sup>		
	1960	1970	1980
Rural	17,812	19,474	22,475
Urban	31,942	41,794	53,808
Total	49,754	61,268	76,283

		Major Crops 1982	Acres Harvested 1982 <sup>4/</sup>
Number of Farms, 1982 <sup>2/</sup>	407	Hay	5,800
Avg. Size of Farms, 1982 <sup>2/</sup> (Ac.)	248	Cotton	4,700
Value of Sales, 1982: (Thou. Dollars)		Soybeans	2,500
Crops <sup>2/</sup>	4,625	Wheat	2,100
Livestock and Poultry <sup>2/</sup>	3,843	Corn	600
Timber Sold <sup>3/</sup>	7,164		

- <sup>1/</sup> U.S. Census of Population--Urban population consists of all persons living in places (incorporated or unincorporated) of 2,500 inhabitants or more.
- <sup>2/</sup> 1982 Census of Agriculture.
- <sup>3/</sup> Trees -- Alabama's No. 1 Money Crop in 1982, C. W. McKee, Alabama Cooperative Extension Service.
- <sup>4/</sup> Alabama Agricultural Statistics, 1982 Revised.

COUNTY NAME: Lee

LAND USE, 1982

----- Nonfederal Rural Land -----										
Cropland	Pasture- land	Forest- land	Minor Uses	Total Nonfederal Rural Land	Urban & Built-up 1000 Acs.	Rural Trans- portation	Federal Land	Census Water	Small Water	Total Surface Area (Census)
36.3	70.2	246.1	9.2	361.8	14.6	8.9	0.0	4.0	4.7	394.0

Source: 1982 NRI, adjusted by inter-agency county and state workgroups.

SHEET AND RILL EROSION BY LAND USE, 1982  
RURAL NONFEDERAL LAND

	Area (1000 Acs.)	Average Erosion Rate (Tons/Acre/Year)	Total Erosion (Tons/Year)	Area Eroding At <= T	Area Eroding At > T -- 2T (1,000 Acres)	Area Eroding At > 2T
Cropland-All	36.3	5.6	202.7	20.8	8.9	6.6
Row Crops	19.2	7.0	134.9	8.6	6.3	4.3
Pastureland	70.2	.6	41.6	68.8	.6	.8
Forest Land	246.1	.6	141.4	239.7	2.4	4.1
Minor Uses	9.2	7.6	70.3	8.2	.3	.7
Total	361.8	1.3	456.0	337.5	12.2	12.2

Source: 1982 NRI, adjusted by SCS county personnel and state workgroup.

RURAL NONFEDERAL LAND NEEDING CONSERVATION TREATMENT BY LAND USE, 1982

	Cropland	Pastureland	Forest
----- 1,000 acres -----			
Area Needing Treatment			
For: Erosion Control	18.9	1.5	2.2
Other	1.9	38.8	153.8
Percent Adequately Protected	43	42	36
Percent Needing Treatment	57	58	63
Percent Not Feasible to Treat	0	0	1

Source: 1982 NRI, adjusted by SCS county personnel and state workgroup.

FLOOD PLAIN LAND USE & AGRICULTURAL FLOOD DAMAGES, 1982

County Area	Floodplain Type	Flood Plain Land Use Acres -----							Average Annual Flood Damages			Number of Sub-W/S In County
		Total	Cropland	Pastureland	Forestland	Urban	Other	Water	Total \$	Cropland \$	Pasture- land \$	
	Tributary	26,069	501	1,540	23,172	90	86	680	25,700	21,100	4,600	-
	Riverine	3,687	0	0	915	0	0	2,772	0	0	0	-
	Total	29,756	501	1,540	24,087	90	86	3,452	25,700	21,100	4,600	15

Source: Flood plain land use, USDA-SCS, Auburn, AL.

LIMESTONE COUNTY, ALABAMA  
1982 Resource Data

Limestone County's population is predominantly rural. Its nonfederal rural land area is distributed as follows: 55 percent cropland, 14 percent pastureland, 29 percent forest land, and 2 percent in minor uses. Soybeans, cotton, wheat, hay, and corn are the principal crops grown. The county ranks 2nd in the state in the value of crop sales, 29th in livestock and poultry sales, and 67th in timber sales. It is an important county in peach production and an important county in milk production. The average sheet and rill erosion rate on cropland, 8.9 tons per acre per year, is 25 percent above the state average. Approximately 77 percent of the cropland needs conservation treatment.

	Population, 1960-1980 1/		
	1960	1970	1980
Rural	27,166	27,339	31,447
Urban	9,347	14,360	14,558
Total	36,513	41,699	46,005

		Major Crops 1982	Acres Harvested 1982 4/
Number of Farms, 1982 2/	1,171	Soybeans	49,200
Avg. Size of Farms, 1982 2/ (Ac.)	207	Cotton	40,500
Value of Sales, 1982: (Thou. Dollars)		Wheat	36,100
Crops 2/	30,512	Hay	24,500
Livestock and Poultry 2/	12,215	Corn	14,100
Timber Sold 3/	527	G. Sorghum	1,100

- 1/ U.S. Census of Population--Urban population consists of all persons living in places (incorporated or unincorporated) of 2,500 inhabitants or more.  
2/ 1982 Census of Agriculture.  
3/ Trees -- Alabama's No. 1 Money Crop in 1982, C. W. McKee, Alabama Cooperative Extension Service.  
4/ Alabama Agricultural Statistics, 1982 Revised.



COUNTY NAME: Limestone

LAND USE, 1982

----- Nonfederal Rural Land -----										
Cropland	Pasture- land	Forest- land	Minor Uses	Total Nonfederal Rural Land	Urban & Built-up	Rural Trans- portation	Federal Land	Census Water	Small Water	Total Surface Area (Census)
					1000 Acs.					
176.0	46.0	91.2	5.9	319.1	12.9	9.8	13.9	31.1	1.8	388.6

Source: 1982 NRI, adjusted by inter-agency county and state workgroups.

SHEET AND RILL EROSION BY LAND USE, 1982  
RURAL NONFEDERAL LAND

	Area (1000 Acs.)	Average Erosion Rate (Tons/Acre/Year)	Total Erosion (Tons/Year)	Area Eroding At <= T	Area Eroding At >T -- 2T (1,000 Acres)	Area Eroding At > 2T
Cropland-All	176.0	8.9	1,569.5	53.9	47.7	74.4
Row Crops	154.5	9.7	1,491.4	75.5	45.6	33.4
Pastureland	46.0	.6	28.2	45.9	0.0	.1
Forest Land	91.2	.2	22.3	89.7	.8	.7
Minor Uses	5.9	7.1	41.9	4.8	0.0	1.0
Total	319.1	5.2	1661.9	194.4	48.6	76.1

Source: 1982 NRI, adjusted by SCS county personnel and state workgroup.

RURAL NONFEDERAL LAND NEEDING CONSERVATION TREATMENT BY LAND USE, 1982

	Cropland	Pastureland	Forest
----- 1,000 acres -----			
Area Needing Treatment			
For: Erosion Control	126.3	1.0	0.1
Other	9.9	30.4	78.9
Percent Adequately Protected	23	32	12
Percent Needing Treatment	77	68	87
Percent Not Feasible to Treat	0	0	1

Source: 1982 NRI, adjusted by SCS county personnel and state workgroup.

FLOOD PLAIN LAND USE & AGRICULTURAL FLOOD DAMAGES, 1982

County Area	Floodplain Type	Flood Plain Land Use Acres -----							Average Annual Flood Damages			Number of Sub-W/S In County
		Total	Cropland	Pastureland	Forestland	Urban	Other	Water	Total \$	Cropland \$	Pasture- land \$	
	Tributary	45,668	20,861	5,325	17,690	438	528	826	724,700	708,700	16,000	-
	Riverine	35,174	4,592	1,375	3,385	12	627	25,183	147,200	143,100	4,100	-
	Total	80,842	25,453	6,700	21,075	450	1,155	26,009	871,900	851,800	20,100	15

Source: Flood plain land use, USDA-SCS, Auburn, AL.

LOWNDES COUNTY, ALABAMA  
1982 Resource Data

Lowndes County's population is predominantly rural. Its nonfederal rural land area is distributed as follows: 13 percent cropland, 32 percent pastureland, 54 percent forest land, and 1 percent in minor uses. Soybeans is the principal crop grown. The county ranks 39th in the state in the value of crop sales, 25th in livestock and poultry sales, and 19th in timber sales. It is one of the leading counties in beef cattle production. The average sheet and rill erosion rate on cropland, 6.3 tons per acre per year, is 11 percent below the state average. Approximately 62 percent of the cropland needs conservation treatment.

	Population, 1960-1980 1/		
	1960	1970	1980
Rural	15,417	12,897	13,253
Urban	0	0	0
Total	15,417	12,897	13,253

		Major Crops 1982	Acres Harvested 1982 4/
Number of Farms, 1982 2/	440	Soybeans	29,700
Avg. Size of Farms, 1982 2/ (Ac.)	515	Hay	6,800
Value of Sales, 1982: (Thou. Dollars)		Wheat	6,800
Crops 2/	4,744	Cotton	4,500
Livestock and Poultry 2/	13,911	Corn	2,200
Timber Sold 3/	8,226		

- 1/ U.S. Census of Population--Urban population consists of all persons living in places (incorporated or unincorporated) of 2,500 inhabitants or more.  
2/ 1982 Census of Agriculture.  
3/ Trees -- Alabama's No. 1 Money Crop in 1982, C. W. McKee, Alabama Cooperative Extension Service.  
4/ Alabama Agricultural Statistics, 1982 Revised.

COUNTY NAME: Lowndes

LAND USE, 1982

----- Nonfederal Rural Land -----										
Cropland	Pasture- land	Forest- land	Minor Uses	Total Nonfederal Rural Land	Urban & Built-up 1000 Acs.	Rural Trans- portation	Federal Land	Census Water	Small Water	Total Surface Area (Census)
58.7	142.6	233.5	5.8	440.6	2.4	8.0	1.8	6.5	4.4	463.7

Source: 1982 NRI, adjusted by inter-agency county and state workgroups.

SHEET AND RILL EROSION BY LAND USE, 1982  
RURAL NONFEDERAL LAND

	Area (1000 Acs.)	Average Erosion Rate (Tons/Acre/Year)	Total Erosion (Tons/Year)	Area Eroding At <= T	Area Eroding At > T -- 2T (1,000 Acres)	Area Eroding At > 2T
Cropland-All	58.7	6.3	370.3	29.3	15.9	13.5
Row Crops	46.1	7.3	336.9	18.4	15.5	12.2
Pastureland	142.6	.7	101.8	136.2	4.4	2.1
Forest Land	233.5	.7	167.9	229.3	.7	3.5
Minor Uses	5.8	13.9	80.8	4.9	.3	.6
Total	440.6	1.6	720.8	399.7	21.3	19.7

Source: 1982 NRI, adjusted by SCS county personnel and state workgroup.

RURAL NONFEDERAL LAND NEEDING CONSERVATION TREATMENT BY LAND USE, 1982

	Cropland	Pastureland	Forest
----- 1,000 acres -----			
Area Needing Treatment			
For: Erosion Control	34.0	8.8	4.3
Other	2.5	61.6	113.8
Percent Adequately Protected	38	50	49
Percent Needing Treatment	62	50	50
Percent Not Feasible to Treat	0	0	1

Source: 1982 NRI, adjusted by SCS county personnel and state workgroup.

FLOOD PLAIN LAND USE & AGRICULTURAL FLOOD DAMAGES, 1982

County Area	Floodplain Type	----- Flood Plain Land Use Acres -----							Average Annual Flood Damages			Number of Sub-W/S In County
		Total	Cropland	Pastureland	Forestland	Urban	Other	Water	Total \$	Cropland \$	Pasture- land \$	
	Tributary	48,313	609	3,872	43,813	19	0	0	28,700	17,000	11,700	-
	Riverine	29,225	3,647	1,788	18,055	680	442	4,613	119,300	114,000	5,300	-
	Total	77,538	4,256	5,660	61,868	699	442	4,613	148,00	131,000	17,000	11

Source: Flood plain land use, USOA-SCS, Auburn, AL.



MACON COUNTY, ALABAMA  
1982 Resource Data

Macon County's population is about equally distributed between rural and urban. Its nonfederal rural land area is distributed as follows: 19 percent cropland, 16 percent pastureland, 64 percent forest land, and 1 percent in minor uses. Soybeans is the principal crop grown. The county ranks 35th in the state in the value of crop sales, 56th in livestock and poultry sales, and 52nd in timber sales. The average sheet and rill erosion rate on cropland, 6.2 tons per acre per year, is 13 percent below the state average. Approximately 60 percent of the cropland needs conservation treatment.

	Population, 1960-1980 1/		
	1960	1970	1980
Rural	23,164	13,813	13,502
Urban	3,553	11,028	13,327
Total	26,717	24,841	26,829

		Major Crops 1982	Acres Harvested 1982 4/
Number of Farms, 1982 2/	401	Soybeans	28,500
Avg. Size of Farms, 1982 2/ (Ac.)	414	Wheat	5,400
Value of Sales, 1982: (Thou.Dollars)		Hay	4,800
Crops 2/	6,125	Cotton	4,220
Livestock and Poultry 2/	4,122	Corn	1,900
Timber Sold 3/	2,848		

- 1/ U.S. Census of Population--Urban population consists of all persons living in places (incorporated or unincorporated) of 2,500 inhabitants or more.  
2/ 1982 Census of Agriculture.  
3/ Trees -- Alabama's No. 1 Money Crop in 1982, C. W. McKee, Alabama Cooperative Extension Service.  
4/ Alabama Agricultural Statistics, 1982 Revised.

COUNTY NAME: Macon

LAND USE, 1982

----- Nonfederal Rural Land -----										
Cropland	Pasture- land	Forest- land	Minor Uses	Total Nonfederal Rural Land	Urban & Built-up 1000 Acs.	Rural Trans- portation	Federal Land	Census Water	Small Water	Total Surface Area (Census)
70.8	58.5	233.3	5.1	367.7	3.8	6.8	10.9	0.1	3.5	392.8

Source: 1982 NRI, adjusted by inter-agency county and state workgroups.

SHEET AND PILL EROSION BY LAND USE, 1982  
RURAL NONFEDERAL LAND

	Area (1000 Acs.)	Average Erosion Rate (Tons/Acre/Year)	Total Erosion (Tons/Year)	Area Eroding At <= T	Area Eroding At > T -- 2T (1,000 Acres)	Area Eroding At > 2T
Cropland-All	70.8	6.2	437.4	36.9	18.8	15.1
Row Crops	42.4	7.3	310.1	16.9	14.3	11.3
Pastureland	58.5	.6	37.0	56.6	1.1	.8
Forest Land	233.3	.8	176.9	228.5	.9	3.9
Minor Uses	5.1	14.6	74.5	4.2	.3	.6
Total	367.7	2.0	725.8	326.2	21.1	20.4

Source: 1982 NRI, adjusted by SCS county personnel and state workgroup.

RURAL NONFEDERAL LAND NEEDING CONSERVATION TREATMENT BY LAND USE, 1982

	Cropland	Pastureland	Forest
----- 1,000 acres -----			
Area Needing Treatment			
For: Erosion Control	39.2	2.4	4.8
Other	3.0	21.9	131.9
Percent Adequately Protected	40	58	41
Percent Needing Treatment	60	42	58
Percent Not Feasible to Treat	0	0	1

Source: 1982 NRI, adjusted by SCS county personnel and state workgroup.

FLOOD PLAIN LAND USE & AGRICULTURAL FLOOD DAMAGES, 1982

County Area	Floodplain Type	Flood Plain Land Use Acres -----							Average Annual Flood Damages			Number of Sub-W/S In County
		Total	Cropland	Pastureland	Forestland	Urban	Other	Water	Total \$	Cropland \$	Pasture- land \$	
	Tributary	65,598	3,128	5,365	55,672	23	1,354	56	103,100	87,000	16,100	-
	Riverine	13,056	2,983	1,169	6,996	0	201	1,707	101,500	98,000	3,500	-
	Total	78,654	6,111	6,534	62,668	23	1,555	1,763	204,600	185,000	19,600	12

Source: Flood plain land use, USDA-SCS, Auburn, AL.

MADISON COUNTY, ALABAMA  
1982 Resource Data

Madison County's population is predominantly urban. Its nonfederal rural land area is distributed as follows: 43 percent cropland, 16 percent pastureland, 39 percent forest land, and 2 percent in minor uses. Soybeans, wheat, cotton, and hay are the principal crops grown. The county ranks 1st in the state in the value of crop sales, 20th in livestock and poultry sales, and 66th in timber sales. It is an important county in milk production. The average sheet and rill erosion rate on cropland, 8.4 tons per acre per year, is 14 percent above the state average. Approximately 74 percent of the cropland needs conservation treatment.

	Population, 1960-1980 1/		
	1960	1970	1980
Rural	42,363	39,975	43,125
Urban	74,985	146,565	153,841
Total	117,348	186,540	196,966

		Major Crops 1982	Acres Harvested 1982 4/
Number of Farms, 1982 2/	1,101	Soybeans	116,000
Avg. Size of Farms, 1982 2/ (Ac.)	266	Wheat	76,700
Value of Sales, 1982: (Thou. Dollars)		Cotton	22,900
Crops 2/	32,326	Hay	17,900
Livestock and Poultry 2/	16,044	Corn	8,800
Timber Sold 3/	897	G. Sorghum	800

- 1/ U.S. Census of Population--Urban population consists of all persons living in places (incorporated or unincorporated) of 2,500 inhabitants or more.
- 2/ 1982 Census of Agriculture.
- 3/ Trees -- Alabama's No. 1 Money Crop in 1982, C. W. McKee, Alabama Cooperative Extension Service.
- 4/ Alabama Agricultural Statistics, 1982 Revised.



COUNTY NAME: Madison

LAND USE, 1982

----- Nonfederal Rural Land -----										
Cropland	Pasture- land	Forest- land	Minor Uses	Total Nonfederal Rural Land	Urban & Built-up 1000 Acs.	Rural Trans- portation	Federal Land	Census Water	Small Water	Total Surface Area (Census)
185.1	67.8	170.4	10.8	434.1	32.0	6.7	40.2	4.7	2.6	520.3

Source: 1982 NRI, adjusted by inter-agency county and state workgroups.

SHEET AND RILL EROSION BY LAND USE, 1982  
RURAL NONFEDERAL LAND

	Area (1000 Acs.)	Average Erosion Rate (Tons/Acre/Year)	Total Erosion (Tons/Year)	Area Eroding At <= T	Area Eroding At > T -- 2T (1,000 Acres)	Area Eroding At > 2T
Cropland-All	185.1	8.4	1,546.3	64.8	51.8	68.5
Row Crops	180.2	9.1	1,545.1 <sup>1/</sup>	51.1	55.5	73.7
Pastureland	67.8	.5	35.6	66.7	.4	.7
Forest Land	170.4	.5	87.8	166.1	2.4	1.8
Minor Uses	10.8	34.6	373.4	7.9	.2	2.7
Total	434.1	4.7	2,043.0	305.6	54.8	73.7

Source: 1982 NRI, adjusted by SCS county personnel and state workgroup.

<sup>1/</sup> Adjusted downward to reflect original relationship with erosion volume for all cropland.

RURAL NONFEDERAL LAND NEEDING CONSERVATION TREATMENT BY LAND USE, 1982

	Cropland	Pastureland	Forest
----- 1,000 acres -----			
Area Needing Treatment			
For: Erosion Control	126.7	0.2	0.9
Other	10.5	32.6	120.9
Percent Adequately Protected	26	51	25
Percent Needing Treatment	74	49	72
Percent Not Feasible to Treat	0	0	3

Source: 1982 NRI, adjusted by SCS county personnel and state workgroup.

FLOOD PLAIN LAND USE & AGRICULTURAL FLOOD DAMAGES, 1982

County Area	Floodplain Type	Flood Plain Land Use Acres -----							Average Annual Flood Damages			Number of Sub-W/S In County
		Total	Cropland	Pastureland	Forestland	Urban	Other	Water	Total \$	Cropland \$	Pasture- land \$	
	Tributary	52,049	8,123	9,463	28,903	3,787	69	1,704	280,700	252,300	28,400	-
	Riverine	41,623	15,533	6,720	15,836	451	255	2,828	490,000	469,800	20,200	-
	Total	93,672	23,656	16,183	44,739	4,238	324	4,532	770,700	722,100	48,600	15

Source: Flood plain land use, USOA-SCS, Auburn, AL.

MARENGO COUNTY, ALABAMA  
1982 Resource Data

Marengo County's population is predominantly rural. Its nonfederal rural land area is distributed as follows: 12 percent cropland, 19 percent pastureland, 68 percent forest land, and 1 percent in minor uses. Wheat, soybeans, and hay are the principal crops grown. The county ranks 31st in the state in the value of crop sales, 47th in livestock and poultry sales, and 12th in timber sales. It is an important county in beef cattle production. The average sheet and rill erosion rate on cropland, 8.1 tons per acre per year, is 14 percent above the state average. Approximately 69 percent of the cropland needs conservation treatment.

	Population, 1960-1980 1/		
	1960	1970	1980
Rural	17,207	13,471	14,596
Urban	9,891	10,348	10,451
Total	27,098	23,819	25,047

		Major Crops 1982	Acres Harvested 1982 4/
Number of Farms, 1982 2/	622	Wheat	29,000
Avg. Size of Farms, 1982 2/ (Ac.)	372	Soybeans	25,700
Value of Sales, 1982: (Thou. Dollars)		Hay	14,400
Crops 2/	6,764	Cotton	3,870
Livestock and Poultry 2/	7,493	Corn	2,200
Timber Sold 3/	13,201	G. Sorghum	1,300

- 1/ U.S. Census of Population--Urban population consists of all persons living in places (incorporated or unincorporated) of 2,500 inhabitants or more.  
2/ 1982 Census of Agriculture.  
3/ Trees -- Alabama's No. 1 Money Crop in 1982, C. W. McKee, Alabama Cooperative Extension Service.  
4/ Alabama Agricultural Statistics, 1982 Revised.

COUNTY NAME: Marengo

LAND USE, 1982

----- Nonfederal Rural Land -----										
Cropland	Pasture- land	Forest- land	Minor Uses	Total Nonfederal Rural Land	Urban & Built-up	Rural Trans- portation	Federal Land	Census Water	Small Water	Total Surface Area (Census)
----- 1000 Acs. -----										
73.1	113.1	411.6	6.3	604.1	6.5	8.5	1.4	0.6	8.5	629.6

Source: 1982 NRI, adjusted by inter-agency county and state workgroups.

SHEET AND RILL EROSION BY LAND USE, 1982  
RURAL NONFEDERAL LAND

	Area (1000 Acs.)	Average Erosion Rate (Tons/Acre/Year)	Total Erosion (Tons/Year)	Area Eroding At <= T	Area Eroding At >T -- 2T	Area Eroding At > 2T
----- (1,000 Acres) -----						
Cropland-All	73.1	8.1	593.6	38.0	14.7	20.5
Row Crops	43.4	11.4	494.4	17.1	7.9	18.4
Pastureland	113.1	1.3	152.0	97.8	8.1	7.3
Forest Land	411.6	0.7	305.4	400.9	1.1	9.5
Minor Uses	6.3	8.9	55.9	4.0	1.8	.5
Total	604.1	1.8	1,106.9	540.7	25.7	37.8

Source: 1982 NRI, adjusted by SCS county personnel and state workgroup.

RURAL NONFEDERAL LAND NEEDING CONSERVATION TREATMENT BY LAND USE, 1982

	Cropland	Pastureland	Forest
----- 1,000 acres -----			
Area Needing Treatment			
For: Erosion Control	41.2	10.1	11.1
Other	9.6	53.5	272.3
Percent Adequately Protected	31	44	31
Percent Needing Treatment	69	56	69
Percent Not Feasible to Treat	0	0	0

Source: 1982 NRI, adjusted by SCS county personnel and state workgroup.

FLOOD PLAIN LAND USE & AGRICULTURAL FLOOD DAMAGES, 1982

County Area	Floodplain Type	Flood Plain Land Use Acres -----							Average Annual Flood Damages			Number of Sub-W/S In County
		Total	Cropland	Pastureland	Forestland	Urban	Other	Water	Total \$	Cropland \$	Pasture- land \$	
	Tributary	94,134	11,725	19,733	61,004	39	1,370	263	405,000	345,800	59,200	-
	Riverine	65,893	3,956	4,646	54,892	337	302	1,760	129,300	115,300	14,000	-
	Total	160,027	15,681	24,379	115,896	376	1,672	2,023	534,300	461,100	73,200	17

Source: Flood plain land use, USDA-SCS, Auburn, AL.



MARION COUNTY, ALABAMA  
1982 Resource Data

Marion County's population is predominantly rural. Its nonfederal rural land area is distributed as follows: 11 percent cropland, 6 percent pastureland, 79 percent forest land, and 4 percent in minor uses. Soybeans and wheat are the principal crops grown. The county ranks 51st in the state in the value of crop sales, 45th in livestock and poultry sales, and 15th in timber sales. The average sheet and rill erosion rate on cropland, 8.5 tons per acre per year, is 20 percent above the state average. Approximately 74 percent of the cropland needs conservation treatment.

	Population, 1960-1980 1/		
	1960	1970	1980
Rural	18,933	17,547	21,294
Urban	2,904	6,241	8,747
Total	21,837	23,788	30,041

		Major Crops 1982	Acres Harvested 1982 4/
Number of Farms, 1982 2/	748	Soybeans	25,300
Avg. Size of Farms, 1982 2/ (Ac.)	152	Wheat	17,300
Value of Sales, 1982: (Thou. Dollars)		Hay	8,200
Crops 2/	3,170	Corn	5,500
Livestock and Poultry 2/	7,855	Cotton	220
Timber Sold 3/	10,471		

- 1/ U.S. Census of Population--Urban population consists of all persons living in places (incorporated or unincorporated) of 2,500 inhabitants or more.
- 2/ 1982 Census of Agriculture.
- 3/ Trees -- Alabama's No. 1 Money Crop in 1982, C. W. McKee, Alabama Cooperative Extension Service.
- 4/ Alabama Agricultural Statistics, 1982 Revised.

COUNTY NAME: Marion

LAND USE, 1982

----- Nonfederal Rural Land -----										
Cropland	Pasture- land	Forest- land	Minor Uses	Total Nonfederal Rural Land	Urban & Built-up	Rural Trans- portation	Federal Land	Census Water	Small Water	Total Surface Area (Census)
					1000 Acs.					
48.7	25.0	359.7	16.3	449.7	10.0	11.6	0.0	1.2	3.4	475.9

Source: 1982 NRI, adjusted by inter-agency county and state workgroups.

SHEET AND RILL EROSION BY LAND USE, 1982  
RURAL NONFEDERAL LAND

	Area (1000 Acs.)	Average Erosion Rate (Tons/Acre/Year)	Total Erosion (Tons/Year)	Area Eroding At <= T	Area Eroding At > T -- 2T	Area Eroding At > 2T
Cropland-All	48.7	8.5	415.2	19.0	12.8	16.9
Row Crops	35.9	9.8	351.3	9.7	10.9	15.4
Pastureland	25.0	1.2	29.3	22.6	2.0	.4
Forest Land	359.7	.7	257.9	350.8	3.6	5.2
Minor Uses	16.3	66.8	1,088.3	10.2	1.8	4.3
Total	449.7	4.0	1,790.6	402.6	20.4	26.7

Source: 1982 NRI, adjusted by SCS county personnel and state workgroup.

RURAL NONFEDERAL LAND NEEDING CONSERVATION TREATMENT BY LAND USE, 1982

	Cropland	Pastureland	Forest
----- 1,000 acres -----			
Area Needing Treatment			
For: Erosion Control	34.9	1.1	3.2
Other	1.1	11.0	275.4
Percent Adequately Protected	26	52	22
Percent Needing Treatment	74	48	77
Percent Not Feasible to Treat	0	0	1

Source: 1982 NRI, adjusted by SCS county personnel and state workgroup.

FLOOD PLAIN LAND USE & AGRICULTURAL FLOOD DAMAGES, 1982

County Area	Floodplain Type	Flood Plain Land Use Acres							Average Annual Flood Damages			Number of Sub-W/S In County
		Total	Cropland	Pastureland	Forestland	Urban	Other	water	Total \$	Cropland \$	Pasture- land \$	
	Tributary	31,325	7,785	4,510	15,885	264	493	2,388	235,900	222,400	13,500	-
	Riverine	0	0	0	0	0	0	0	0	0	0	-
	Total	31,325	7,785	4,510	15,885	264	493	2,388	235,900	222,400	13,500	12

Source: Flood plain land use, USDA-SCS, Auburn, AL.

MARSHALL COUNTY, ALABAMA  
1982 Resource Data

Marshall County's population is predominantly rural. Its nonfederal rural land area is distributed as follows: 24 percent cropland, 19 percent pastureland, 53 percent forest land, and 4 percent in minor uses. Soybeans, wheat, and hay are the principal crops grown. The county ranks 34th in the state in the value of crop sales, 3rd in livestock and poultry sales, and 61st in timber sales. It is a leading county in broiler and egg production. The average sheet and rill erosion rate on cropland, 8.1 tons per acre per year, is 14 percent above the state average. Approximately 77 percent of the cropland needs conservation treatment.

	Population, 1960-1980 1/		
	1960	1970	1980
Rural	25,546	27,907	33,825
Urban	22,472	26,304	31,797
Total	48,018	54,211	65,622

		Major Crops 1982	Acres Harvested 1982 4/
Number of Farms, 1982 2/	1,664	Soybeans	38,200
Avg. Size of Farms, 1982 2/ (Ac.)	91	Wheat	14,000
Value of Sales, 1982: (Thou.Dollars)		Hay	11,900
Crops 2/	6,127	Corn	7,400
Livestock and Poultry 2/	73,757	Cotton	730
Timber Sold 3/	1,998		

- 1/ U.S. Census of Population--Urban population consists of all persons living in places (incorporated or unincorporated) of 2,500 inhabitants or more.  
2/ 1982 Census of Agriculture.  
3/ Trees -- Alabama's No. 1 Money Crop in 1982, C. W. McKee, Alabama Cooperative Extension Service.  
4/ Alabama Agricultural Statistics, 1982 Revised.



COUNTY NAME: Marshall

LAND USE, 1982

----- Nonfederal Rural Land -----										
Cropland	Pasture- land	Forest- land	Minor Uses	Total Nonfederal Rural Land	Urban & Built-up 1000 Acs.	Rural Trans- portation	Federal Land	Census Water	Small Water	Total Surface Area (Census)
80.0	64.4	173.0	12.9	330.3	18.0	12.6	0.0	35.7	2.1	398.7

Source: 1982 NRI, adjusted by inter-agency county and state workgroups.

SHEET AND RILL EROSION BY LAND USE, 1982  
RURAL NONFEDERAL LAND

	Area (1000 Acs.)	Average Erosion Rate (Tons/Acre/Year)	Total Erosion (Tons/Year)	Area Eroding At <= T	Area Eroding At > T -- 2T (1,000 Acres)	Area Eroding At > 2T
Cropland-All	80.0	8.1	645.9	22.7	19.2	38.1
Row Crops	69.0	9.3	640.7	12.8	17.6	38.6
Pastureland	64.4	.6	40.2	61.9	1.3	1.2
Forest Land	173.0	.5	83.8	168.9	2.5	1.7
Minor Uses	12.9	144.5	1,863.9	8.1	.5	4.3
Total	330.3	8.0	2,633.8	261.7	23.4	45.2

Source: 1982 NRI, adjusted by SCS county personnel and state workgroup.

RURAL NONFEDERAL LAND NEEDING CONSERVATION TREATMENT BY LAND USE, 1982

	Cropland	Pastureland	Forest
----- 1,000 acres -----			
Area Needing Treatment			
For: Erosion Control	60.3	0.3	0.9
Other	1.7	30.9	119.8
Percent Adequately Protected	23	51	27
Percent Needing Treatment	77	49	70
Percent Not Feasible to Treat	0	0	3

Source: 1982 NRI, adjusted by SCS county personnel and state workgroup.

FLOOD PLAIN LAND USE & AGRICULTURAL FLOOD DAMAGES, 1982

County Area	Floodplain Type	Flood Plain Land Use Acres -----							Average Annual Flood Damages			Number of Sub-W/S In County
		Total	Cropland	Pastureland	Forestland	Urban	Other	Water	Total \$	Cropland \$	Pasture- land \$	
	Tributary	11,640	1,377	3,359	6,904	0	0	0	48,600	38,500	10,100	-
	Riverine	48,882	5,430	1,453	6,941	91	0	34,947	231,000	226,700	4,300	-
	Total	60,502	6,807	4,812	13,845	91	0	34,947	279,600	265,200	14,400	20

Source: Flood plain land use, USDA-SCS, Auburn, AL.

MOBILE COUNTY, ALABAMA  
1982 Resource Data

Mobile County's population is predominantly urban. Its nonfederal rural land area is distributed as follows: 12 percent cropland, 6 percent pastureland, 76 percent forest land, and 6 percent in minor uses. Soybeans is the principal crop grown. The county ranks 4th in the state in the value of crop sales, 33rd in livestock and poultry sales, and 14th in timber sales. The county is one of the leading producers of pecans and is an important producer of Irish potatoes. The average sheet and rill erosion rate on cropland, 5.4 tons per acre per year, is 24 percent below the state average. Approximately 60 percent of the cropland needs conservation treatment.

	Population, 1960-1980 1/		
	<u>1960</u>	<u>1970</u>	<u>1980</u>
Rural	43,688	56,828	63,461
Urban	270,613	260,480	301,519
Total	314,301	317,308	364,980

	Major Crops <u>1982</u>	Acres Harvested <u>1982 4/</u>
Number of Farms, 1982 <u>2/</u>		
Avg. Size of Farms, 1982 <u>2/</u> (Ac.)		
Value of Sales, 1982: (Thou. Dollars)		
Crops <u>2/</u>		
Livestock and Poultry <u>2/</u>		
Timber Sold <u>3/</u>		
	Soybeans	53,400
	Corn	9,700
	Wheat	4,200
	Hay	3,900

- 1/ U.S. Census of Population--Urban population consists of all persons living in places (incorporated or unincorporated) of 2,500 inhabitants or more.
- 2/ 1982 Census of Agriculture.
- 3/ Trees -- Alabama's No. 1 Money Crop in 1982, C. W. McKee, Alabama Cooperative Extension Service.
- 4/ Alabama Agricultural Statistics, 1982 Revised.

COUNTY NAME: Mobile

LAND USE, 1982

----- Nonfederal Rural Land -----										
Cropland	Pasture- land	Forest- land	Minor Uses	Total Nonfederal Rural Land	Urban & Built-up 1000 Acs.	Rural Trans- portation	Federal Land	Census water	Small Water	Total Surface Area (Census)
82.8	43.4	523.5	38.5	688.2	81.8	14.7	0.2	24.4	7.4	816.7

Source: 1982 NFI, adjusted by inter-agency county and state workgroups.

SHEET AND RILL EROSION BY LAND USE, 1982  
RURAL NONFEDERAL LAND

	Area (1000 Acs.)	Average Erosion Rate (Tons/Acre/Year)	Total Erosion (Tons/Year)	Area Eroding At <= T	Area Eroding At > T -- 2T (1,000 Acres)	Area Eroding At > 2T
Cropland-All	82.8	5.4	449.5	41.0	31.6	10.2
Row Crops	58.3	6.4	373.3	23.1	27.2	8.1
Pastureland	43.4	.5	21.4	43.4	.0	.0
Forest Land	523.5	.4	227.0	513.8	6.2	3.5
Minor Uses	38.5	1.6	60.8	38.5	.0	.0
Total	688.2	1.1	758.7	636.7	37.8	13.7

Source: 1982 NFI, adjusted by SCS county personnel and state workgroup.

RURAL NONFEDERAL LAND NEEDING CONSERVATION TREATMENT BY LAND USE, 1982

	Cropland	Pastureland	Forest
----- 1,000 acres -----			
Area Needing Treatment			
For: Erosion Control	46.2	.0	2.4
Other	3.6	27.7	388.2
Percent Adequately Protected	40	36	24
Percent Needing Treatment	60	64	75
Percent Not Feasible to Treat	0	0	1

Source: 1982 NFI, adjusted by SCS county personnel and state workgroup.

FLOOD PLAIN LAND USE & AGRICULTURAL FLOOD DAMAGES, 1982

County Area	Floodplain Type	Flood Plain Land Use Acres -----							Average Annual Flood Damages			Number of Sub-W/S In County
		Total	Cropland	Pastureland	Forestland	Urban	Other	Water	Total \$	Cropland \$	Pasture- land \$	
	Tributary	57,489	1,381	202	51,305	2,505	43	2,053	19,200	18,600	600	
	Riverine	325,910	133	85	103,771	12,965	99	7,268	6,600	6,300	300	-
	Total	383,399	1,514	287	155,076	15,470	142	210,910	23,200	22,300	900	20

Source: Flood plain land use, USDA-SCS, Auburn, AL.



MONROE COUNTY, ALABAMA  
1982 Resource Data

Monroe County's population is predominantly rural. Its nonfederal rural land area is distributed as follows: 11 percent cropland, 5 percent pastureland, 82 percent forest land, and 1 percent in minor uses. Soybeans and corn are the principal crops grown. The county ranks 28th in the state in the value of crop sales, 52nd in livestock and poultry sales, and 2nd in timber sales. The average sheet and rill erosion rate on cropland, 5.4 tons per acre per year, is 24 percent below the state average. Approximately 60 percent of the cropland needs conservation treatment.

	Population, 1960-1980 1/		
	1960	1970	1980
Rural	18,748	16,037	16,977
Urban	3,624	4,846	5,674
Total	22,372	20,883	22,651

		Major Crops 1982	Acres Harvested 1982 4/
Number of Farms, 1982 2/	540	Soybeans	25,800
Avg. Size of Farms, 1982 2/ (Ac.)	283	Corn	15,300
Value of Sales, 1982: (Thou. Dollars)		Cotton	5,450
Crops 2/	7,036	Wheat	4,900
Livestock and Poultry 2/	5,392	Hay	2,500
Timber Sold 3/	26,254	G. Sorghum	1,900

- 1/ U.S. Census of Population--Urban population consists of all persons living in places (incorporated or unincorporated) of 2,500 inhabitants or more.
- 2/ 1982 Census of Agriculture.
- 3/ Trees -- Alabama's No. 1 Money Crop in 1982, C. W. McKee, Alabama Cooperative Extension Service.
- 4/ Alabama Agricultural Statistics, 1982 Revised.

COUNTY NAME: Monroe

LAND USE, 1982

----- Nonfederal Rural Land -----										
Cropland	Pasture- land	Forest- land	Minor Uses	Total Nonfederal Rural Land	Urban & Built-up	Rural Trans- portation	Federal Land	Census Water	Small Water	Total Surface Area (Census)
					1000 Acs.					
72.0	31.0	522.1	5.4	630.5	5.6	8.0	1.9	7.1	6.2	659.3

Source: 1982 NRI, adjusted by inter-agency county and state workgroups.

SHEET AND RILL EROSION BY LAND USE, 1982  
RURAL NONFEDERAL LAND

	Area (1000 Acs.)	Average Erosion Rate (Tons/Acre/Year)	Total Erosion (Tons/Year)	Area Eroding At <= T	Area Eroding At > T -- 2T (1,000 Acres)	Area Eroding At > 2T
Cropland-All	72.0	5.4	390.9	35.6	27.5	8.9
Row Crops	41.8	6.5	267.7	16.6	19.5	5.8
Pastureland	31.0	.5	15.3	31.0	.0	.0
Forest Land	522.1	.4	226.4	512.4	6.2	3.5
Minor Uses	5.4	1.6	8.5	5.4	.0	.0
Total	630.5	1.0	641.1	584.4	33.7	12.4

Source: 1982 NRI, adjusted by SCS county personnel and state workgroup.

RURAL NONFEDERAL LAND NEEDING CONSERVATION TREATMENT BY LAND USE, 1982

	Cropland	Pastureland	Forest
----- 1,000 acres -----			
Area Needing Treatment			
For: Erosion Control	40.1	0	2.4
Other	3.1	19.8	387.2
Percent Adequately Protected	40	36	24
Percent Needing Treatment	60	64	75
Percent Not Feasible to Treat	0	0	1

Source: 1982 NRI, adjusted by SCS county personnel and state workgroup.

FLOOD PLAIN LAND USE & AGRICULTURAL FLOOD DAMAGES, 1982

County Area	Floodplain Type	Flood Plain Land Use Acres -----							Average Annual Flood Damages			Number of Sub-w/S In County
		Total	Cropland	Pastureland	Forestland	Urban	Other	Water	Total \$	Cropland \$	Pasture- land \$	
	Tributary	47,961	146	3,129	44,252	153	101	180	13,000	3,600	9,400	-
	Riverine	35,562	832	215	31,755	44	293	2,423	24,100	23,400	700	-
	Total	83,523	978	3,344	76,007	197	394	2,603	37,100	27,000	10,100	19

Source: Flood plain land use, USDA-SCS, Auburn, AL.

MONTGOMERY COUNTY, ALABAMA  
1982 Resource Data

Montgomery County's population is predominantly urban. Its nonfederal rural land area is distributed as follows: 24 percent cropland, 28 percent pastureland, 41 percent forest land, and 7 percent in minor uses. Soybeans, hay, and wheat are the principal crops grown. The county ranks 25th in the state in the value of crop sales, 18th in livestock and poultry sales, and 51st in timber sales. It is the leading county in beef cattle production, a leader in milk production, and important in the production of pecans. The average sheet and rill erosion rate on cropland, 6.5 tons per acre per year, is 8 percent below the state average. Approximately 66 percent of the cropland needs conservation treatment.

	Population, 1960-1980 1/		
	1960	1970	1980
Rural	26,397	28,807	19,431
Urban	142,813	138,983	177,607
Total	169,210	167,790	197,038

		Major Crops 1982	Acres Harvested 1982 4/
Number of Farms, 1982 2/	759	Soybeans	44,100
Avg. Size of Farms, 1982 2/ (Ac.)	426	Hay	22,400
Value of Sales, 1982: (Thou.Dollars)		Wheat	21,700
Crops 2/	8,679	G. Sorghum	2,300
Livestock and Poultry 2/	17,085	Cotton	1,860
Timber Sold 3/	3,250	Corn	900
		Peanuts	110

- 1/ U.S. Census of Population--Urban population consists of all persons living in places (incorporated or unincorporated) of 2,500 inhabitants or more.  
2/ 1982 Census of Agriculture.  
3/ Trees -- Alabama's No. 1 Money Crop in 1982, C. W. McKee, Alabama Cooperative Extension Service.  
4/ Alabama Agricultural Statistics, 1982 Revised.



COUNTY NAME: Montgomery

LAND USE, 1982

----- Nonfederal Rural Land -----										
Cropland	Pasture- land	Forest- land	Minor Uses	Total Nonfederal Rural Land	Urban & Built-up	Rural Trans- portation	Federal Land	Census Water	Small Water	Total Surface Area (Census)
					1000 Acs.					
108.2	126.5	180.4	30.5	445.6	36.7	12.8	3.3	4.5	10.2	511.8

Source: 1982 NRI, adjusted by inter-agency county and state workgroups.

SHEET AND RILL EROSION BY LAND USE, 1982  
RURAL NONFEDERAL LAND

	Area (1000 Acs.)	Average Erosion Rate (Tons/Acre/Year)	Total Erosion (Tons/Year)	Area Eroding At <= T	Area Eroding At > T -- 2T	Area Eroding At > 2T
Cropland-All	108.2	6.5	706.3	50.1	30.3	27.9
Row Crops	80.8	7.5	604.9	29.6	27.5	23.7
Pastureland	126.5	.7	93.0	120.4	4.3	1.8
Forest Land	180.4	.7	133.4	176.9	.6	2.9
Minor Uses	30.5	14.2	434.1	25.2	1.8	3.5
Total	445.6	3.1	1,366.8	372.6	36.9	36.1

Source: 1982 NRI, adjusted by SCS county personnel and state workgroup.

RURAL NONFEDERAL LAND NEEDING CONSERVATION TREATMENT BY LAND USE, 1982

	Cropland	Pastureland	Forest
----- 1,000 acres -----			
Area Needing Treatment			
For: Erosion Control	67.3	8.5	3.5
Other	4.5	56.6	95.2
Percent Adequately Protected	34	48	45
Percent Needing Treatment	66	52	54
Percent Not Feasible to Treat	0	0	1

Source: 1982 NRI, adjusted by SCS county personnel and state workgroup.

FLOOD PLAIN LAND USE & AGRICULTURAL FLOOD DAMAGES, 1982

County Area	Floodplain Type	Flood Plain Land Use Acres -----							Average Annual Flood Damages			Number of Sub-W/S In County
		Total	Cropland	Pastureland	Forestland	Urban	Other	Water	Total \$	Cropland \$	Pasture- land \$	
	Tributary	72,935	1,728	18,431	50,638	1,521	537	80	104,800	49,500	55,300	-
	Riverine	42,144	12,243	4,847	16,222	3,934	1,617	3,281	426,700	412,200	14,500	-
	Total	115,079	13,971	23,278	66,860	5,455	2,154	3,361	531,500	461,700	69,800	16

Source: Flood plain land use, USDA-SCS, Auburn, AL.

MORGAN COUNTY, ALABAMA  
1982 Resource Data

Morgan County's population is predominantly urban. Its nonfederal rural land area is distributed as follows: 20 percent cropland, 28 percent pastureland, 47 percent forest land, and 5 percent in minor uses. Wheat, soybeans, and hay are the principal crops grown. The county ranks 29th in the state in the value of crop sales, 8th in livestock and poultry sales, and 54th in timber sales. It is an important county in hog, broiler, and milk production. The average sheet and rill erosion rate on cropland, 8.0 tons per acre per year, is 13 percent above the state average. Approximately 76 percent of the cropland needs conservation treatment.

	Population, 1960-1980 1/		
	1960	1970	1980
Rural	26,237	31,907	35,521
Urban	34,217	45,399	54,710
Total	60,454	77,306	90,231

		Major Crops 1982	Acres Harvested 1982 4/
Number of Farms, 1982 2/	1,353	Wheat	43,400
Avg. Size of Farms, 1982 2/ (Ac.)	124	Soybeans	38,500
Value of Sales, 1982: (Thou. Dollars)		Hay	23,800
Crops 2/	7,029	Cotton	3,670
Livestock and Poultry 2/	30,701	Corn	2,100
Timber Sold 3/	2,593	G. Sorghum	600

- 1/ U.S. Census of Population--Urban population consists of all persons living in places (incorporated or unincorporated) of 2,500 inhabitants or more.
- 2/ 1982 Census of Agriculture.
- 3/ Trees -- Alabama's No. 1 Money Crop in 1982, C. W. McKee, Alabama Cooperative Extension Service.
- 4/ Alabama Agricultural Statistics, 1982 Revised.

COUNTY NAME: Morgan

LAND USE, 1982

----- Nonfederal Rural Land -----										
Cropland	Pasture- land	Forest- land	Minor Uses	Total Nonfederal Rural Land	Urban & Built-up	Rural Trans- portation	Federal Land	Census Water	Small Water	Total Surface Area (Census)
					1000 Acs.					
66.1	91.5	156.0	16.5	330.1	20.7	8.1	6.6	15.3	2.6	383.4

Source: 1982 NRI, adjusted by inter-agency county and state workgroups.

SHEET AND RILL EROSION BY LAND USE, 1982  
RURAL NONFEDERAL LAND

	Area (1000 Acs.)	Average Erosion Rate (Tons/Acre/Year)	Total Erosion (Tons/Year)	Area Eroding At < = T	Area Eroding At > T -- 2T (1,000 Acres)	Area Eroding At > 2T
Cropland-All	66.1	8.0	530.1	20.4	16.6	29.1
Row Crops	60.3	9.1	543.6 <sup>1/</sup>	13.1	16.2	31.0
Pastureland	91.5	.6	57.0	88.0	1.9	1.6
Forest Land	156.0	.7	104.3	151.3	2.4	2.4
Minor Uses	16.5	159.7	2,635.3	10.2	.6	5.7
Total	330.1	10.1	3,326.7	269.9	21.5	38.8

Source: 1982 NRI, adjusted by SCS county personnel and state workgroup.

<sup>1/</sup> Adjusted downward to reflect original relationship with erosion volume for all cropland.

RURAL NONFEDERAL LAND NEEDING CONSERVATION TREATMENT BY LAND USE, 1982

	Cropland	Pastureland	Forest
----- 1,000 acres -----			
Area Needing Treatment			
For: Erosion Control	48.3	0.4	0.9
Other	1.9	43.8	113.7
Percent Adequately Protected	24	51	23
Percent Needing Treatment	76	49	74
Percent Not Feasible to Treat	0	0	3

Source: 1982 NRI, adjusted by SCS county personnel and state workgroup.

FLOOD PLAIN LAND USE & AGRICULTURAL FLOOD DAMAGES, 1982

County Area	Floodplain Type	Flood Plain Land Use Acres -----							Average Annual Flood Damages			Number of Sub-W/S In County
		Total	Cropland	Pastureland	Forestland	Urban	Other	Water	Total \$	Cropland \$	Pasture- land \$	
	Tributary	52,461	10,764	17,673	21,689	1,380	667	288	330,900	277,900	53,000	-
	Riverine	18,837	4,340	348	4,111	675	61	9,302	134,000	132,900	1,100	-
	Total	71,298	15,104	18,021	25,800	2,055	728	9,590	464,900	410,800	54,100	10

Source: Flood plain land use, USDA-SCS, Auburn, AL.



PERRY COUNTY, ALABAMA  
1982 Resource Data

Perry County's population is predominantly rural. Its nonfederal rural land area is distributed as follows: 24 percent cropland, 17 percent pastureland, 59 percent forest land, and less than 0.5 percent in minor uses. Soybeans is the principal crop grown. The county ranks 26th in the state in the value of crop sales, 41st in livestock and poultry sales, and 28th in timber sales. It is one of the leading counties in milk production and important in commercial catfish production. The average sheet and rill erosion rate on cropland, 6.7 tons per acre per year, is 6 percent below the state average. Approximately 70 percent of the cropland needs conservation treatment.

	Population, 1960-1980 1/		
	1960	1970	1980
Rural	13,557	11,099	10,545
Urban	3,801	4,289	4,467
Total	17,358	15,388	15,012

		Major Crops 1982	Acres Harvested 1982 4/
Number of Farms, 1982 2/	422	Soybeans	79,600
Avg. Size of Farms, 1982 2/ (Ac.)	463	Wheat	24,900
Value of Sales, 1982: (Thou.Dollars)		Hay	18,700
Crops 2/	8,270	Corn	3,100
Livestock and Poultry 2/	8,585	G. Sorghum	1,200
Timber Sold 3/	6,887	Peanuts	100

- 1/ U.S. Census of Population--Urban population consists of all persons living in places (incorporated or unincorporated) of 2,500 inhabitants or more.  
2/ 1982 Census of Agriculture.  
3/ Trees -- Alabama's No. 1 Money Crop in 1982, C. W. McKee, Alabama Cooperative Extension Service.  
4/ Alabama Agricultural Statistics, 1982 Revised.

COUNTY NAME: Perry

LAND USE, 1982

----- Nonfederal Rural Land -----										
Cropland	Pasture- land	Forest- land	Minor Uses	Total Nonfederal Rural Land	Urban & Built-up	Rural Trans- portation	Federal Land	Census Water	Small water	Total Surface Area (Census)
----- 1000 Acs. -----										
98.6	68.8	243.9	1.8	413.1	2.5	6.3	32.7	1.2	4.0	459.8

Source: 1982 NRI, adjusted by inter-agency county and state workgroups.

SHEET AND RILL EROSION BY LAND USE, 1982  
RURAL NONFEDERAL LAND

	Area (1000 Acs.)	Average Erosion Rate (Tons/Acre/Year)	Total Erosion (Tons/Year)	Area Eroding At <= T	Area Eroding At > T -- 2T	Area Eroding At > 2T
Cropland-All	98.6	6.7	663.5	42.3	28.4	27.9
Row Crops	85.8	7.7	660.6	28.1	29.6	28.0
Pastureland	68.8	.7	49.5	65.6	2.2	1.0
Forest Land	243.9	.7	185.9	238.8	.9	4.2
Minor Uses	1.8	12.9	23.2	1.6	.1	.2
Total	413.1	2.2	922.1	348.3	31.5	33.3

Source: 1982 NRI, adjusted by SCS county personnel and state workgroup.

RURAL NONFEDERAL LAND NEEDING CONSERVATION TREATMENT BY LAND USE, 1982

	Cropland	Pastureland	Forest
----- 1,000 acres -----			
Area Needing Treatment			
For: Erosion Control	65.2	4.3	5.0
Other	4.0	30.0	140.0
Percent Adequately Protected	30	50	40
Percent Needing Treatment	70	50	59
Percent Not Feasible to Treat	0	0	1

Source: 1982 NRI, adjusted by SCS county personnel and state workgroup.

FLOOD PLAIN LAND USE & AGRICULTURAL FLOOD DAMAGES, 1982

County Area	Floodplain Type	Flood Plain Land Use Acres -----							Average Annual Flood Damages			Number of Sub-W/S In County
		Total	Cropland	Pastureland	Forestland	Urban	Other	Water	Total \$	Cropland \$	Pasture- land \$	
	Tributary	42,278	7,923	2,960	31,328	0	0	67	230,700	221,800	8,900	-
	Riverine	31,693	2,530	3,002	25,134	0	0	1,027	79,900	70,900	9,000	-
	Total	73,971	10,453	5,962	56,462	0	0	1,094	310,600	292,700	17,900	14

Source: Flood plain land use, USOA-SCS, Auburn, AL.

PICKENS COUNTY, ALABAMA  
1982 Resource Data

Pickens County's population is predominantly rural. Its nonfederal rural land area is distributed as follows: 9 percent cropland, 4 percent pastureland, 85 percent forest land, and 2 percent in minor uses. Soybeans is the principal crop grown. The county ranks 41st in the state in the value of crop sales, 10th in livestock and poultry sales, and 7th in timber sales. The average sheet and rill erosion rate on cropland, 6.4 tons per acre per year, is 10 percent below the state average. Approximately 64 percent of the cropland needs conservation treatment.

	Population, 1960-1980 1/		
	1960	1970	1980
Rural	18,687	17,475	18,274
Urban	3,195	2,851	3,207
Total	21,882	20,326	21,481

		Major Crops 1982	Acres Harvested 1982 4/
Number of Farms, 1982 2/	525	Soybeans	22,100
Avg. Size of Farms, 1982 2/ (Ac.)	255	Hay	13,800
Value of Sales, 1982: (Thou.Dollars)		Wheat	10,800
Crops 2/	4,399	Cotton	4,650
Livestock and Poultry 2/	23,912	Corn	2,600
Timber Sold 3/	15,262		

- 1/ U.S. Census of Population--Urban population consists of all persons living in places (incorporated or unincorporated) of 2,500 inhabitants or more.
- 2/ 1982 Census of Agriculture.
- 3/ Trees -- Alabama's No. 1 Money Crop in 1982, C. W. McKee, Alabama Cooperative Extension Service.
- 4/ Alabama Agricultural Statistics, 1982 Revised.



COUNTY NAME: Pickens

LAND USE, 1982

----- Nonfederal Rural Land -----										
Cropland	Pasture- land	Forest- land	Minor Uses	Total Nonfederal Rural Land	Urban & Built-up	Rural Trans- portation	Federal Land	Census Water	Small Water	Total Surface Area (Census)
					1000 Acs.					
46.6	22.8	460.9	8.5	538.8	3.8	8.1	4.6	6.4	8.1	569.8

Source: 1982 NRI, adjusted by inter-agency county and state workgroups.

SHEET AND RILL EROSION BY LAND USE, 1982  
RURAL NONFEDERAL LAND

	Area (1000 Acs.)	Average Erosion Rate (Tons/Acre/Year)	Total Erosion (Tons/Year)	Area Eroding At <= T	Area Eroding At > T -- 2T	Area Eroding At > 2T
Cropland-All	46.6	6.4	299.3	22.4	12.8	11.4
Row Crops	29.2	7.5	217.9	10.8	9.9	8.4
Pastureland	22.8	.6	14.2	22.1	.4	.3
Forest Land	460.9	.8	355.2	450.9	1.8	8.2
Minor Uses	8.5	13.8	117.4	7.1	.4	.9
Total	538.8	1.5	786.1	502.5	15.4	20.8

Source: 1982 NRI, adjusted by SCS county personnel and state workgroup.

RURAL NONFEDERAL LAND NEEDING CONSERVATION TREATMENT BY LAND USE, 1982

	Cropland	Pastureland	Forest
----- 1,000 acres -----			
Area Needing Treatment			
For: Erosion Control	28.0	0.9	9.7
Other	2.0	8.3	272.3
Percent Adequately Protected	36	59	38
Percent Needing Treatment	64	41	61
Percent Not Feasible to Treat	0	0	1

Source: 1982 NRI, adjusted by SCS county personnel and state workgroup.

FLOOD PLAIN LAND USE & AGRICULTURAL FLOOD DAMAGES, 1982

County Area	Floodplain Type	Flood Plain Land Use Acres							Average Annual Flood Damages			Number of Sub-W/S In County
		Total	Cropland	Pastureland	Forestland	Urban	Other	Water	Total \$	Cropland \$	Pasture- land \$	
	Tributary	81,919	3,021	4,829	73,485	301	113	170	110,500	96,000	14,500	-
	Riverine	57,054	5,367	3,246	46,357	10	908	1,166	176,200	166,500	9,700	-
	Total	138,973	8,388	8,075	119,842	311	1,021	1,336	286,700	262,500	24,200	18

Source: Flood plain land use, USDA-SCS, Auburn, AL.

PIKE COUNTY, ALABAMA  
1982 Resource Data

Pike County's population is predominantly urban. Its nonfederal rural land area is distributed as follows: 19 percent cropland, 19 percent pastureland, 60 percent forest land, and 2 percent in minor uses. Peanuts, soybeans, hay, and corn are the principal crops grown. The county ranks 16th in the state in the value of crop sales, 19th in livestock and poultry sales, and 20th in timber sales. It is important in beef cattle production. The average sheet and rill erosion rate on cropland, 6.9 tons per acre per year, is 3 percent below the state average. Approximately 60 percent of the cropland needs conservation treatment.

	Population, 1960-1980 1/		
	1960	1970	1980
Rural	13,227	10,847	11,892
Urban	12,760	14,191	16,158
Total	25,987	25,038	28,050

		Major Crops 1982	Acres Harvested 1982 4/
Number of Farms, 1982 2/	733	Peanuts	17,700
Avg. Size of Farms, 1982 2/ (Ac.)	282	Soybeans	15,500
Value of Sales, 1982: (Thou.Dollars)		Hay	12,000
Crops 2/	14,519	Corn	11,700
Livestock and Poultry 2/	16,392	Wheat	8,500
Timber Sold 3/	8,188	Cotton	1,970

- 1/ U.S. Census of Population--Urban population consists of all persons living in places (incorporated or unincorporated) of 2,500 inhabitants or more.  
2/ 1982 Census of Agriculture.  
3/ Trees -- Alabama's No. 1 Money Crop in 1982, C. W. McKee, Alabama Cooperative Extension Service.  
4/ Alabama Agricultural Statistics, 1982 Revised.

COUNTY NAME: Pike

LAND USE, 1982

----- Nonfederal Rural Land -----										
Cropland	Pasture- land	Forest- land	Minor Uses	Total Nonfederal Rural Land	Urban & Built-up 1000 Acs.	Rural Trans- portation	Federal Land	Census Water	Small Water	Total Surface Area (Census)
78.0	76.7	252.9	6.8	414.4	5.4	7.6	0.0	0.1	2.7	430.2

Source: 1982 NRI, adjusted by inter-agency county and state workgroups.

SHEET AND RILL EROSION BY LAND USE, 1982  
RURAL NONFEDERAL LAND

	Area (1000 Acs.)	Average Erosion Rate (Tons/Acre/Year)	Total Erosion (Tons/Year)	Area Eroding At <= T	Area Eroding At > T -- 2T (1,000 Acres)	Area Eroding At > 2T
Cropland-All	78.0	6.9	534.9	36.6	24.8	16.5
Row Crops	62.9	7.4	462.9	26.7	22.1	14.1
Pastureland	76.7	.5	38.1	76.2	.2	.3
Forest Land	252.9	.4	106.0	247.8	2.8	2.3
Minor Uses	6.8	7.9	53.5	5.8	.5	.5
Total	414.4	1.8	732.5	366.4	28.3	19.6

Source: 1982 NRI, adjusted by SCS county personnel and state workgroup.

RURAL NONFEDERAL LAND NEEDING CONSERVATION TREATMENT BY LAND USE, 1982

	Cropland	Pastureland	Forest
----- 1,000 acres -----			
Area Needing Treatment			
For: Erosion Control	45.9	1.4	4.3
Other	0.8	29.4	117.7
Percent Adequately Protected	40	60	52
Percent Needing Treatment	60	40	48
Percent Not Feasible to Treat	0	0	0

Source: 1982 NRI, adjusted by SCS county personnel and state workgroup.

FLOOD PLAIN LAND USE & AGRICULTURAL FLOOD DAMAGES, 1982

County Area	Floodplain Type	Flood Plain Land Use Acres -----							Average Annual Flood Damages			Number of Sub-W/S In County
		Total	Cropland	Pastureland	Forestland	Urban	Other	Water	Total \$	Cropland \$	Pasture- land \$	
	Tributary	37,750	82	1,273	36,395	0	0	0	6,200	2,400	3,800	-
	Riverine	18,145	157	674	17,314	0	0	0	10,800	8,800	2,000	-
	Total	55,895	239	1,947	53,709	0	0	0	17,000	11,200	5,800	12

Source: Flood plain land use, USDA-SCS, Auburn, AL.



RANDOLPH COUNTY, ALABAMA  
1982 Resource Data

Randolph County's population is predominantly rural. Its nonfederal rural land area is distributed as follows: 5 percent cropland, 13 percent pastureland, 80 percent forest land, and 2 percent in minor uses. Hay, corn, and soybeans are the principal crops grown. The county ranks 62nd in the state in the value of crop sales, 13th in livestock and poultry sales, and 33rd in timber sales. It is an important county in egg production. The average sheet and rill erosion rate on cropland, 5.0 tons per acre per year, is 30 percent below the state average. Approximately 64 percent of the cropland needs conservation treatment.

	Population, 1960-1980 1/		
	1960	1970	1980
Rural	14,199	13,080	14,179
Urban	5,278	5,251	5,896
Total	19,477	18,331	20,075

		Major Crops 1982	Acres Harvested 1982 4/
Number of Farms, 1982 2/	695	Hay	5,100
Avg. Size of Farms, 1982 2/ (Ac.)	143	Corn	3,400
Value of Sales, 1982: (Thou. Dollars)		Soybeans	3,100
Crops 2/	542	Wheat	1,400
Livestock and Poultry 2/	20,094		
Timber Sold 3/	6,001		

1/ U.S. Census of Population--Urban population consists of all persons living in places (incorporated or unincorporated) of 2,500 inhabitants or more.

2/ 1982 Census of Agriculture.

3/ Trees -- Alabama's No. 1 Money Crop in 1982, C. W. McKee, Alabama Cooperative Extension Service.

4/ Alabama Agricultural Statistics, 1982 Revised.

COUNTY NAME: Randolph

LAND USE, 1982

----- Nonfederal Rural Land -----										
Cropland	Pasture- land	Forest- land	Minor Uses	Total Nonfederal Rural Land	Urban & Built-up 1000 Acs.	Rural Trans- portation	Federal Land	Census Water	Small Water	Total Surface Area (Census)
17.7	44.2	280.6	5.3	347.8	4.9	7.7	0.0	10.8	2.9	374.1

Source: 1982 NFI, adjusted by inter-agency county and state workgroups.

SHEET AND RILL EROSION BY LAND USE, 1982  
RURAL NONFEDERAL LAND

	Area (1000 Acs.)	Average Erosion Rate (Tons/Acre/Year)	Total Erosion (Tons/Year)	Area Eroding At <= T	Area Eroding At > T -- 2T	Area Eroding At > 2T
					(1,000 Acres)	
Cropland-All	17.7	5.0	89.2	10.1	4.2	3.4
Row Crops	11.8	7.3	86.0	4.7	3.8	3.3
Pastureland	44.2	.6	25.5	43.6	.2	.4
Forest Land	280.6	.5	138.1	272.7	3.4	4.5
Minor Uses	5.3	1.6	8.3	5.1	0	.2
Total	347.8	0.8	261.1	331.6	7.8	8.5

Source: 1982 NRI, adjusted by SCS county personnel and state workgroup.

RURAL NONFEDERAL LAND NEEDING CONSERVATION TREATMENT BY LAND USE, 1982

	Cropland	Pastureland	Forest
	----- 1,000 acres -----		
Area Needing Treatment			
For: Erosion Control	10.1	0.6	1.0
Other	1.2	29.4	179.4
Percent Adequately Protected	36	32	35
Percent Needing Treatment	64	68	64
Percent Not Feasible to Treat	0	0	1

Source: 1982 NRI, adjusted by SCS county personnel and state workgroup.

FLOOD PLAIN LAND USE & AGRICULTURAL FLOOD DAMAGES, 1982

County Area	Floodplain Type	Flood Plain Land Use Acres -----							Average Annual Flood Damages			Number of Sub-W/S In County
		Total	Cropland	Pastureland	Forestland	Urban	Other	Water	Total \$	Cropland \$	Pasture- land \$	
	Tributary	18,402	426	4,767	12,783	24	258	144	29,600	15,300	14,300	-
	Riverine	17,355	338	1,345	4,140	0	30	11,502	16,300	12,300	4,000	-
	Total	35,757	764	6,112	16,923	24	288	11,646	45,900	27,600	18,300	18

Source: Flood plain land use, USDA-SCS, Auburn, AL.

RUSSELL COUNTY, ALABAMA  
1982 Resource Data

Russell County's population is predominantly urban. Its nonfederal rural land area is distributed as follows: 16 percent cropland, 13 percent pastureland, 70 percent forest land, and 1 percent in minor uses. Soybeans is the principal crop grown. The county ranks 30th in the state in the value of crop sales, 60th in livestock and poultry sales, and 42nd in timber sales. It is an important county in pecan production. The average sheet and rill erosion rate on cropland, 6.1 tons per acre per year, is 14 percent below the state average. Approximately 56 percent of the cropland needs conservation treatment.

	Population, 1960-1980 1/		
	<u>1960</u>	<u>1970</u>	<u>1980</u>
Rural	18,726	20,113	17,322
Urban	27,625	25,281	30,034
Total	46,351	45,394	47,356

		<u>Major Crops 1982</u>	<u>Acres Harvested 1982 4/</u>
Number of Farms, 1982 <u>2/</u>	314	Soybeans	31,900
Avg. Size of Farms, 1982 <u>2/</u> (Ac.)	499	Wheat	4,200
Value of Sales, 1982: (Thou.Dollars)		Hay	3,600
Crops <u>2/</u>	6,770	Cotton	3,450
Livestock and Poultry <u>2/</u>	3,138	Peanuts	2,310
Timber Sold <u>3/</u>	4,762	Corn	1,300

- 1/ U.S. Census of Population--Urban population consists of all persons living in places (incorporated or unincorporated) of 2,500 inhabitants or more.
- 2/ 1982 Census of Agriculture.
- 3/ Trees -- Alabama's No. 1 Money Crop in 1982, C. W. McKee, Alabama Cooperative Extension Service.
- 4/ Alabama Agricultural Statistics, 1982 Revised.



COUNTY NAME: Russell

LAND USE, 1982

----- Nonfederal Rural Land -----										
Cropland	Pasture- land	Forest- land	Minor Uses	Total Nonfederal Rural Land	Urban & Built-up	Rural Trans- portation	Federal Land	Census Water	Small Water	Total Surface Area (Census)
----- 1000 Acs. -----										
59.2	46.1	258.5	2.1	365.9	15.0	5.6	12.4	8.3	6.6	413.8

Source: 1982 NRI, adjusted by inter-agency county and state workgroups.

SHEET AND RILL EROSION BY LAND USE, 1982  
RURAL NONFEDERAL LAND

	Area (1000 Acs.)	Average Erosion Rate (Tons/Acre/Year)	Total Erosion (Tons/Year)	Area Eroding At < = T	Area Eroding At > T -- 2T	Area Eroding At > 2T
Cropland-All	59.2	6.1	362.1	29.2	16.2	13.8
Row Crops	53.1	7.2	358.9 <sup>1/</sup>	19.7	19.0	14.4
Pastureland	46.1	.6	29.4	43.9	1.2	1.0
Forest Land	258.5	.8	204.7	248.2	3.1	7.2
Minor Uses	2.1	154.1	323.6	.4	.4	1.3
Total	365.9	2.5	919.8	320.5	20.9	24.5

Source: 1982 NRI, adjusted by SCS county personnel and state workgroup.

<sup>1/</sup> Adjusted downward to reflect original relationship with erosion volume for all cropland.

RURAL NONFEDERAL LAND NEEDING CONSERVATION TREATMENT BY LAND USE, 1982

	Cropland	Pastureland	Forest
----- 1,000 acres -----			
Area Needing Treatment			
For: Erosion Control	33.7	2.9	7.4
Other	2.8	23.9	197.1
Percent Adequately Protected	44	55	46
Percent Needing Treatment	56	45	53
Percent Not Feasible to Treat	0	0	1

Source: 1982 NRI, adjusted by SCS county personnel and state workgroup.

FLOOD PLAIN LAND USE & AGRICULTURAL FLOOD DAMAGES, 1982

County Area	Floodplain Type	Flood Plain Land Use Acres -----							Average Annual Flood Damages			Number of Sub-W/S In County
		Total	Cropland	Pastureland	Forestland	Urban	Other	Water	Total \$	Cropland \$	Pasture- land \$	
	Tributary	43,422	2,956	1,103	38,679	243	276	165	96,400	93,100	3,300	-
	Riverine	18,758	1,365	472	15,250	224	858	589	47,400	46,000	1,400	-
	Total	62,180	4,321	1,575	53,929	467	1,134	754	143,800	139,100	4,700	10

Source: Flood plain land use, USOA-SCS, Auburn, AL.

ST. CLAIR COUNTY, ALABAMA  
1982 Resource Data

St. Clair County's population is predominantly rural. Its nonfederal rural land area is distributed as follows: 4 percent cropland, 12 percent pastureland, 75 percent forest land, and 9 percent in minor uses. Hay is the principal crop grown. The county ranks 46th in the state in the value of crop sales, 26th in livestock and poultry sales, and 39th in timber sales. It is the leading county in tomato production. The average sheet and rill erosion rate on cropland, 8.0 tons per acre per year, is 13 percent above the state average. Approximately 75 percent of the cropland needs conservation treatment.

	Population, 1960-1980 <sup>1/</sup>		
	<u>1960</u>	<u>1970</u>	<u>1980</u>
Rural	20,894	22,310	33,946
Urban	4,494	5,646	7,259
Total	25,388	27,956	41,205

		<u>Major Crops 1982</u>	<u>Acres Harvested 1982 <sup>4/</sup></u>
Number of Farms, 1982 <sup>2/</sup>	661	Hay	10,600
Avg. Size of Farms, 1982 <sup>2/</sup> (Ac.)	144	Soybeans	2,700
Value of Sales, 1982: (Thou. Dollars)		Wheat	1,400
Crops <sup>2/</sup>	3,791		
Livestock and Poultry <sup>2/</sup>	13,744		
Timber Sold <sup>3/</sup>	5,392		

- <sup>1/</sup> U.S. Census of Population--Urban population consists of all persons living in places (incorporated or unincorporated) of 2,500 inhabitants or more.
- <sup>2/</sup> 1982 Census of Agriculture.
- <sup>3/</sup> Trees -- Alabama's No. 1 Money Crop in 1982, C. W. McKee, Alabama Cooperative Extension Service.
- <sup>4/</sup> Alabama Agricultural Statistics, 1982 Revised.

COUNTY NAME: St. Clair

LAND USE, 1982

----- Nonfederal Rural Land -----										
Cropland	Pasture- land	Forest- land	Minor Uses	Total Nonfederal Rural Land	Urban & Built-up 1000 Acs.	Rural Trans- portation	Federal Land	Census Water	Small Water	Total Surface Area (Census)
13.6	45.0	281.9	34.0	374.5	16.4	11.8	0.0	10.8	4.5	418.0

Source: 1982 NRI, adjusted by inter-agency county and state workgroups.

SHEET AND RILL EROSION BY LAND USE, 1982  
RURAL NONFEDERAL LAND

	Area (1000 Acs.)	Average Erosion Rate (Tons/Acre/Year)	Total Erosion (Tons/Year)	Area Eroding At <= T	Area Eroding At > T -- 2T (1,000 Acres)	Area Eroding At > 2T
Cropland-All	13.6	8.0	108.7	4.4	3.5	5.7
Row Crops	7.8	9.1	71.1	1.7	2.1	4.0
Pastureland	45.0	0.6	24.8	44.0	.4	.6
Forest Land	281.9	0.5	151.0	274.7	4.1	3.1
Minor Uses	34.0	45.9	1,562.0	24.1	.7	9.1
Total	374.5	4.9	1,846.5	347.2	8.7	18.5

Source: 1982 NRI, adjusted by SCS county personnel and state workgroup.

RURAL NONFEDERAL LAND NEEDING CONSERVATION TREATMENT BY LAND USE, 1982

	Cropland	Pastureland	Forest
----- 1,000 acres -----			
Area Needing Treatment			
For: Erosion Control	9.8	0.1	1.5
Other	0.4	21.4	198.1
Percent Adequately Protected	25	52	26
Percent Needing Treatment	75	48	71
Percent Not Feasible to Treat	0	0	3

Source: 1982 NRI, adjusted by SCS county personnel and state workgroup.

FLOOD PLAIN LAND USE & AGRICULTURAL FLOOD DAMAGES, 1982

County Area	Floodplain Type	Flood Plain Land Use Acres -----							Average Annual Flood Damages			Number of Sub-W/S In County
		Total	Cropland	Pastureland	Forestland	Urban	Other	Water	Total \$	Cropland \$	Pasture- land \$	
	Tributary	33,647	1,102	6,925	25,131	170	48	271	49,600	28,800	20,800	-
	Riverine	20,316	217	222	6,359	0	590	12,928	6,700	6,000	700	-
	Total	53,963	1,319	7,147	31,490	170	638	13,199	56,300	34,800	21,500	15

Source: Flood plain land use, USDA-SCS, Auburn, AL.



SHELBY COUNTY, ALABAMA  
1982 Resource Data

Shelby County's population is predominantly rural. Its nonfederal rural land area is distributed as follows: 6 percent cropland, 8 percent pastureland, 84 percent forest land, and 2 percent in minor uses. Hay, cotton, and soybeans are the principal crops grown. The county ranks 52nd in the state in the value of crop sales, 36th in livestock and poultry sales, and 44th in timber sales. It is a leading county in milk production. The average sheet and rill erosion rate on cropland, 7.9 tons per acre per year, is 11 percent above the state average. Approximately 73 percent of the cropland needs conservation treatment.

	Population, 1960-1980 1/		
	1960	1970	1980
Rural	29,369	31,639	42,799
Urban	27,634	6,398	23,499
Total	57,002	38,037	66,298

		Major Crops 1982	Acres Harvested 1982 4/
Number of Farms, 1982 2/	516	Hay	7,100
Avg. Size of Farms, 1982 2/ (Ac.)	169	Cotton	5,600
Value of Sales, 1982: (Thou. Dollars)		Soybeans	5,400
Crops 2/	2,477	Wheat	2,000
Livestock and Poultry 2/	9,595		
Timber Sold 3/	4,143		

- 1/ U.S. Census of Population--Urban population consists of all persons living in places (incorporated or unincorporated) of 2,500 inhabitants or more.  
2/ 1982 Census of Agriculture.  
3/ Trees -- Alabama's No. 1 Money Crop in 1982, C. W. McKee, Alabama Cooperative Extension Service.  
4/ Alabama Agricultural Statistics, 1982 Revised.

COUNTY NAME: Shelby

LAND USE, 1982

----- Nonfederal Rural Land -----										
Cropland	Pasture- land	Forest- land	Minor Uses	Total Nonfederal Rural Land	Urban & Built-up 1000 Acs.	Rural Trans- portation	Federal Land	Census Water	Small Water	Total Surface Area (Census)
29.2	39.0	393.0	8.0	469.2	26.8	10.5	0.0	6.1	5.8	518.4

Source: 1982 MRI, adjusted by inter-agency county and state workgroups.

SHEET AND RILL EROSION BY LAND USE, 1982  
RURAL NONFEDERAL LAND

	Area (1000 Acs.)	Average Erosion Rate (Tons/Acre/Year)	Total Erosion (Tons/Year)	Area Eroding At <= T	Area Eroding At > T -- 2T (1,000 Acres)	Area Eroding At > 2T
Cropland-All	29.2	7.9	230.4	10.7	8.1	10.4
Row Crops	20.2	8.5	171.4	6.6	6.5	7.1
Pastureland	39.0	.6	21.9	38.0	.5	.5
Forest Land	393.0	.7	272.7	380.7	6.0	6.3
Minor Uses	8.0	117.8	942.3	5.2	.3	2.5
Total	469.2	3.1	1,467.3	434.6	14.9	19.7

Source: 1982 MRI, adjusted by SCS county personnel and state workgroup.

RURAL NONFEDERAL LAND NEEDING CONSERVATION TREATMENT BY LAND USE, 1982

	Cropland	Pastureland	Forest
----- 1,000 acres -----			
Area Needing Treatment			
For: Erosion Control	19.7	0.1	2.4
Other	1.5	18.6	288.2
Percent Adequately Protected	27	52	23
Percent Needing Treatment	73	48	74
Percent Not Feasible to Treat	0	0	3

Source: 1982 MRI, adjusted by SCS county personnel and state workgroup.

FLOOD PLAIN LAND USE & AGRICULTURAL FLOOD DAMAGES, 1982

County Area	Floodplain Type	Flood Plain Land Use Acres -----							Average Annual Flood Damages			Number of Sub-w/S In County
		Total	Cropland	Pastureland	Forestland	Urban	Other	Water	Total \$	Cropland \$	Pasture- land \$	
	Tributary	34,683	632	4,113	27,303	1,466	116	1,053	31,700	19,400	12,300	-
	Riverine	22,303	1,366	2,622	10,862	418	0	7,065	57,500	49,600	7,900	-
	Total	57,016	1,998	6,735	38,165	1,884	116	8,118	89,200	69,000	20,200	16

Source: Flood plain land use, USDA-SCS, Auburn, AL.

SUMTER COUNTY, ALABAMA  
1982 Resource Data

Sumter County's population is predominantly rural. Its nonfederal rural land area is distributed as follows: 13 percent cropland, 21 percent pastureland, 64 percent forest land, and 2 percent in minor uses. Soybeans is the principal crop grown. The county ranks 49th in the state in the value of crop sales, 44th in livestock and poultry sales, and 24th in timber sales. It is an important county in commercial catfish production. The average sheet and rill erosion rate on cropland, 9.1 tons per acre per year, is 28 percent above the state average. Approximately 76 percent of the cropland needs conservation treatment.

	Population, 1960-1980 1/		
	1960	1970	1980
Rural	17,115	13,930	10,329
Urban	2,926	3,044	6,579
Total	20,041	16,974	16,908

		Major Crops 1982	Acres Harvested 1982 4/
Number of Farms, 1982 2/	475	Soybeans	36,600
Avg. Size of Farms, 1982 2/ (Ac.)	442	Hay	15,100
Value of Sales, 1982: (Thou. Dollars)		Wheat	11,300
Crops 2/	3,594	Corn	2,700
Livestock and Poultry 2/	8,020	G. Sorghum	500
Timber Sold 3/	7,750	Cotton	260

1/ U.S. Census of Population--Urban population consists of all persons living in places (incorporated or unincorporated) of 2,500 inhabitants or more.

2/ 1982 Census of Agriculture.

3/ Trees -- Alabama's No. 1 Money Crop in 1982, C. W. McKee, Alabama Cooperative Extension Service.

4/ Alabama Agricultural Statistics, 1982 Revised.



COUNTY NAME: Sumter

LAND USE, 1982

----- Nonfederal Rural Land -----										
Cropland	Pasture- land	Forest- land	Minor Uses	Total Nonfederal Rural Land	Urban & Built-up 1000 Acs.	Rural Trans- portation	Federal Land	Census Water	Small Water	Total Surface Area (Census)
71.2	116.8	354.5	11.5	554.0	3.9	6.5	7.7	4.2	8.4	584.7

Source: 1982 NRI, adjusted by inter-agency county and state workgroups.

SHEET AND RILL EROSION BY LAND USE, 1982  
RURAL NONFEDERAL LAND

	Area (1000 Acs.)	Average Erosion Rate (Tons/Acre/Year)	Total Ercsion (Tons/Year)	Area Eroding At < = T	Area Eroding At > T -- 2T (1,000 Acres)	Area Eroding At > 2T
Cropland-All	71.2	9.1	645.6	35.4	12.7	23.1
Row Crops	47.8	11.3	542.0	18.9	8.8	20.1
Pastureland	116.8	1.7	203.8	94.2	11.8	10.8
Forest Land	354.5	.7	257.6	344.5	.8	9.2
Minor Uses	11.5	3.2	37.3	5.7	5.5	.3
Total	554.0	2.1	1,144.3	479.8	30.8	43.4

Source: 1982 NPI, adjusted by SCS county personnel and state workgroup.

RURAL NONFEDERAL LAND NEEDING CONSERVATION TREATMENT BY LAND USE, 1982

	Cropland	Pastureland	Forest
----- 1,000 acres -----			
Area Needing Treatment			
For: Erosion Control	42.1	13.9	10.7
Other	12.0	62.2	247.8
Percent Adeouately Protected	24	35	27
Percent Needing Treatment	76	65	73
Percent Not Feasible to Treat	0	0	0

Source: 1982 NPI, adjusted by SCS county personnel and state workgroup.

FLOOD PLAIN LAND USE & AGRICULTURAL FLOOD DAMAGES, 1982

County Area	Floodplain Type	Flood Plain Land Use Acres -----							Average Annual Flood Damages			Number of Sub-W/S In County
		Total	Cropland	Pastureland	Forestland	Urban	Other	Water	Total \$	Cropland \$	Pasture- land \$	
	Tributary	83,873	6,818	13,756	62,515	8	16	760	232,900	191,600	41,300	-
	Riverine	69,854	2,654	3,199	58,035	0	3,106	2,860	83,900	74,300	9,600	-
	Total	153,727	9,472	16,955	120,550	8	3,122	3,620	316,800	265,900	50,900	17

Source: Flood plain land use, USDA-SCS, Auburn, AL.

TALLADEGA COUNTY, ALABAMA  
1982 Resource Data

Talladega County's population is about equally distributed between rural and urban. Its nonfederal rural land area is distributed as follows: 9 percent cropland, 31 percent pastureland, 58 percent forest land, and 2 percent in minor uses. Soybeans and wheat are the principal crops grown. The county ranks 43rd in the state in the value of crop sales, 21st in livestock and poultry sales, and 43rd in timber sales. The average sheet and rill erosion rate on cropland, 7.5 tons per acre per year, is 6 percent above the state average. Approximately 70 percent of the cropland needs conservation treatment.

	Population, 1960-1980 <sup>1/</sup>		
	<u>1960</u>	<u>1970</u>	<u>1980</u>
Rural	29,997	30,532	36,430
Urban	35,498	34,748	37,396
Total	65,495	65,280	73,826

		Major Crops <u>1982</u>	Acres Harvested <u>1982 <sup>4/</sup></u>
Number of Farms, 1982 <sup>2/</sup>	630	Soybeans	26,900
Avg. Size of Farms, 1982 <sup>2/</sup> (Ac.)	204	Wheat	13,400
Value of Sales, 1982: (Thou. Dollars)		Hay	4,400
Crops <sup>2/</sup>	4,225	G. Sorghum	2,000
Livestock and Poultry <sup>2/</sup>	15,139	Corn	1,100
Timber Sold <sup>3/</sup>	4,292	Cotton	720

- <sup>1/</sup> U.S. Census of Population--Urban population consists of all persons living in places (incorporated or unincorporated) of 2,500 inhabitants or more.
- <sup>2/</sup> 1982 Census of Agriculture.
- <sup>3/</sup> Trees -- Alabama's No. 1 Money Crop in 1982, C. W. McKee, Alabama Cooperative Extension Service.
- <sup>4/</sup> Alabama Agricultural Statistics, 1982 Revised.

COUNTY NAME: Talladega

LAND USE, 1982

----- Nonfederal Rural Land -----										
Cropland	Pasture- land	Forest- land	Minor Uses	Total Nonfederal Pural Land	Urban & Built-up 1000 Acs.	Rural Trans- portation	Federal Land	Census Water	Small Water	Total Surface Area (Census)
34.2	121.9	230.5	7.6	394.4	20.1	11.8	52.9	4.6	2.6	486.4

Source: 1982 NRI, adjusted by inter-agency county and state workgroups.

SHEET AND RILL EROSION BY LAND USE, 1982  
PURAL NONFEDERAL LAND

	Area (1000 Acs.)	Average Erosion Rate (Tons/Acre/Year)	Total Erosion (Tons/Year)	Area Eroding At <= T	Area Eroding At > T -- 2T (1,000 Acres)	Area Eroding At > 2T
Cropland-All	34.2	7.5	258.0	13.9	9.6	10.7
Row Crops	32.9	8.4	209.3 <sup>1/</sup>	10.9	10.5	11.5
Pastureland	121.9	.5	61.6	120.5	.3	1.0
Forest Land	230.5	.3	74.1	226.1	2.9	1.5
Minor Uses	7.8	11.7	91.0	5.9	.1	1.8
Total	394.4	1.2	484.7	366.4	12.9	15.0

Source: 1982 NRI, adjusted by SCS county personnel and state workgroup.

<sup>1/</sup> Adjusted downward to reflect original relationship with erosion volume for all cropland.

RURAL NONFEDERAL LAND NEEDING CONSERVATION TREATMENT BY LAND USE, 1982

	Cropland	Pastureland	Forest
----- 1,000 acres -----			
Area Needing Treatment			
For: Erosion Control	22.2	0.5	1.0
Other	2.0	61.5	148.9
Percent Adequately Protected	30	49	32
Percent Needing Treatment	70	51	65
Percent Not Feasible to Treat	0	0	3

Source: 1982 NRI, adjusted by SCS county personnel and state workgroup.

FLOOD PLAIN LAND USE & AGRICULTURAL FLOOD DAMAGES, 1982

County Area	Floodplain Type	Flood Plain Land Use Acres							Average Annual Flood Damages			Number of Sub-W/S In County
		Total	Cropland	Pastureland	Forestland	Urban	Other	Water	Total \$	Cropland \$	Pasture- land \$	
	Tributary	34,700	5,274	6,054	22,170	548	213	441	165,900	147,700	18,200	-
	Riverine	29,288	1,137	2,136	13,674	790	0	11,551	38,200	31,800	6,400	-
	Total	63,988	6,411	8,190	35,844	1,338	213	11,992	204,100	179,500	24,600	16

Source: Flood plain land use, USDA-SCS, Auburn, AL.



TALLAPOOSA COUNTY, ALABAMA  
1982 Resource Data

Tallapoosa County's population is predominantly rural. Its nonfederal rural land area is distributed as follows: 4 percent cropland, 9 percent pastureland, 86 percent forest land, and 1 percent in minor uses. Hay is the principal crop grown. The county ranks 57th in the state in the value of crop sales, 48th in livestock and poultry sales, and 35th in timber sales. The average sheet and rill erosion rate on cropland, 5.4 tons per acre per year, is 24 percent below the state average. Approximately 59 percent of the cropland needs conservation treatment.

	Population, 1960-1980 <sup>1/</sup>		
	<u>1960</u>	<u>1970</u>	<u>1980</u>
Rural	17,153	17,230	20,383
Urban	17,854	16,610	18,293
Total	35,007	33,840	38,676

		<u>Major Crops 1982</u>	<u>Acres Harvested 1982 <sup>4/</sup></u>
Number of Farms, 1982 <sup>2/</sup>	391	Hay	4,900
Avg. Size of Farms, 1982 <sup>2/</sup> (Ac.)	226	Corn	1,700
Value of Sales, 1982: (Thou. Dollars)		Wheat	1,400
Crops <sup>2/</sup>	1,129	Cotton	1,150
Livestock and Poultry <sup>2/</sup>	7,423		
Timber Sold <sup>3/</sup>	5,746		

- <sup>1/</sup> U.S. Census of Population--Urban population consists of all persons living in places (incorporated or unincorporated) of 2,500 inhabitants or more.
- <sup>2/</sup> 1982 Census of Agriculture.
- <sup>3/</sup> Trees -- Alabama's No. 1 Money Crop in 1982, C. W. McKee, Alabama Cooperative Extension Service.
- <sup>4/</sup> Alabama Agricultural Statistics, 1982 Revised.

COUNTY NAME: Tallapoosa

LAND USE, 1982

----- Nonfederal Rural Land -----										
Cropland	Pasture- land	Forest- land	Minor Uses	Total Nonfederal Rural Land	Urban & Built-up	Pural Trans- portation	Federal Land	Census Water	Small Water	Total Surface Area (Census)
					1000 Acs.					
17.7	36.6	364.3	5.6	424.2	9.8	9.2	1.9	41.4	3.6	490.1

Source: 1982 NRI, adjusted by inter-agency county and state workgroups.

SHEET AND RILL EROSION BY LAND USE, 1982  
RURAL NONFEDERAL LAND

	Area (1000 Acs.)	Average Erosion Rate (Tons/Acre/Year)	Total Erosion (Tons/Year)	Area Eroding At < = T	Area Eroding At > T -- 2T (1,000 Acres)	Area Eroding At > 2T
Cropland-All	17.7	5.4	95.7	10.1	4.3	3.3
Rcw Crops	10.5	7.2	75.2	4.5	3.4	2.6
Pastureland	36.6	0.6	21.3	36.0	.2	.3
Forest Land	364.3	0.5	181.7	354.2	4.3	5.8
Minor Uses	5.6	3.0	16.7	5.3	.1	.2
Total	424.2	0.7	315.4	405.6	8.9	9.6

Source: 1982 NRI, adjusted by SCS county personnel and state workgroup.

RURAL NONFEDERAL LAND NEEDING CONSERVATION TREATMENT BY LAND USE, 1982

	Cropland	Pastureland	Forest
----- 1,000 acres -----			
Area Needing Treatment			
For: Erosion Control	9.5	0.6	1.5
Other	1.0	23.0	232.4
Percent Adequately Protected	41	36	35
Percent Needing Treatment	59	64	64
Percent Not Feasible to Treat	0	0	1

Source: 1982 NRI, adjusted by SCS county personnel and state workgroup.

FLOOD PLAIN LAND USE & AGRICULTURAL FLOOD DAMAGES, 1982

County Area	Floodplain Type	Flood Plain Land Use Acres -----							Average Annual Flood Damages			Number of Sub-W/S In County
		Total	Cropland	Pastureland	Forestland	Urban	Other	Water	Total \$	Cropland \$	Pasture- land \$	
	Tributary	12,172	85	618	11,469	0	0	0	4,600	2,800	1,600	-
	Riverine	42,154	714	222	11,228	0	5	29,985	23,100	22,400	700	-
	Total	54,326	799	840	22,697	0	5	29,985	27,700	25,200	2,500	21

Source: Flood plain land use, USDA-SCS, Auburn, AL.

TUSCALOOSA COUNTY, ALABAMA  
1982 Resource Data

Tuscaloosa County's population is predominantly urban. Its nonfederal rural land area is distributed as follows: 5 percent cropland, 5 percent pastureland, 87 percent forest land, and 3 percent in minor uses. Soybeans is the principal crop grown. The county ranks 37th in the state in the value of crop sales, 49th in livestock and poultry sales, and 16th in timber sales. It is an important county in commercial catfish production. The average sheet and rill erosion rate on cropland, 8.7 tons per acre per year, is 23 percent above the state average. Approximately 72 percent of the cropland needs conservation treatment.

	Population, 1960-1980 1/		
	1960	1970	1980
Rural	32,278	30,154	37,987
Urban	76,769	85,875	99,554
Total	109,047	116,029	137,541

		Major Crops 1982	Acres Harvested 1982 4/
Number of Farms, 1982 2/	650	Soybeans	31,100
Avg. Size of Farms, 1982 2/ (Ac.)	207	Wheat	9,000
Value of Sales, 1982: (Thou. Dollars)		Hay	6,500
Crops 2/	5,583	Cotton	4,470
Livestock and Poultry 2/	6,969	Corn	4,100
Timber Sold 3/	9,933		

- 1/ U.S. Census of Population--Urban population consists of all persons living in places (incorporated or unincorporated) of 2,500 inhabitants or more.  
2/ 1982 Census of Agriculture.  
3/ Trees -- Alabama's No. 1 Money Crop in 1982, C. W. McKee, Alabama Cooperative Extension Service.  
4/ Alabama Agricultural Statistics, 1982 Revised.



COUNTY NAME: Tuscaloosa

LAND USE, 1982

----- Nonfederal Rural Land -----										
Cropland	Pasture- land	Forest- land	Minor Uses	Total Nonfederal Rural Land	Urban & Built-up 1000 Acs.	Rural Trans- portation	Federal Land	Census Water	Small Water	Total Surface Area (Census)
41.4	43.2	683.7	21.4	789.7	23.6	17.6	11.6	10.3	12.5	865.5

Source: 1982 NRI, adjusted by inter-agency county and state workgroups.

SHEET AND RILL EROSION BY LAND USE, 1982  
RURAL NONFEDERAL LAND

	Area (1000 Acs.)	Average Erosion Rate (Tons/Acre/Year)	Total Erosion (Tons/Year)	Area Eroding At <= T	Area Eroding At > T -- 2T (1,000 Acres)	Area Eroding At > 2T
Cropland-All	41.4	8.7	359.1	18.3	11.5	11.6
Row Crops	35.5	10.0	353.3	12.1	12.1	11.3
Pastureland	43.2	1.1	47.8	39.3	3.2	.7
Forest Land	683.7	.7	500.5	665.8	7.5	10.4
Minor Uses	21.4	125.6	2,688.7	13.0	1.8	6.6
Total	789.7	4.6	3,596.1	736.4	24.0	29.3

Source: 1982 NRI, adjusted by SCS county personnel and state workgroup.

RURAL NONFEDERAL LAND NEEDING CONSERVATION TREATMENT BY LAND USE, 1982

	Cropland	Pastureland	Forest
----- 1,000 acres -----			
Area Needing Treatment			
For: Erosion Control	28.7	6.4	5.9
Other	1.1	16.4	523.1
Percent Adequately Protected	28	47	22
Percent Needing Treatment	72	53	77
Percent Not Feasible to Treat	0	0	1

Source: 1982 NRI, adjusted by SCS county personnel and state workgroup.

FLOOD PLAIN LAND USE & AGRICULTURAL FLOOD DAMAGES, 1982

County Area	Floodplain Type	Flood Plain Land Use Acres -----							Average Annual Flood Damages			Number of Sub-W/S In County
		Total	Cropland	Pastureland	Forestland	Urban	Other	Water	Total \$	Cropland \$	Pasture- land \$	
	Tributary	29,824	1,169	2,623	22,928	1,177	391	1,536	54,300	46,500	7,800	-
	Riverine	91,010	24,846	4,782	45,107	3,490	1,134	11,651	1,199,600	1,185,200	14,400	-
	Total	120,834	26,015	7,405	68,035	4,667	1,525	13,187	1,253,900	1,231,700	22,200	26

Source: Flood plain land use, USDA-SCS, Auburn, AL.

WALKER COUNTY, ALABAMA  
1982 Resource Data

Walker County's population is predominantly rural. Its nonfederal rural land area is distributed as follows: 4 percent cropland, 12 percent pastureland, 77 percent forest land, and 7 percent in minor uses. Soybeans and hay are the principal crops grown. The county ranks 58th in the state in the value of crop sales, 24th in livestock and poultry sales, and 55th in timber sales. The average sheet and rill erosion rate on cropland, 8.1 tons per acre per year, is 14 percent above the state average. Approximately 79 percent of the cropland needs conservation treatment.

	Population, 1960-1980 1/		
	1960	1970	1980
Rural	40,225	42,698	50,828
Urban	13,986	13,548	17,832
Total	54,211	56,246	68,660

	Major Crops 1982	Acres Harvested 1982 4/
Number of Farms, 1982 2/		
Avg. Size of Farms, 1982 2/ (Ac.)		
Value of Sales, 1982: (Thou. Dollars)		
Crops 2/		
Livestock and Poultry 2/		
Timber Sold 3/		
	Soybeans	8,800
	Hay	7,700
	Corn	1,600

- 1/ U.S. Census of Population--Urban population consists of all persons living in places (incorporated or unincorporated) of 2,500 inhabitants or more.
- 2/ 1982 Census of Agriculture.
- 3/ Trees -- Alabama's No. 1 Money Crop in 1982, C. W. McKee, Alabama Cooperative Extension Service.
- 4/ Alabama Agricultural Statistics, 1982 Revised.

COUNTY NAME: Walker

LAND USE, 1982

----- Nonfederal Rural Land -----										
Cropland	Pasture- land	Forest- land	Minor Uses	Total Nonfederal Rural Land	Urban & Built-up 1000 Acs.	Rural Trans- portation	Federal Land	Census Water	Small Water	Total Surface Area (Census)
21.0	57.7	363.4	34.2	476.3	15.1	15.2	0.0	3.0	7.6	517.2

Source: 1982 NPI, adjusted by inter-agency county and state workgroups.

SHEET AND RILL EROSION BY LAND USE, 1982  
RURAL NONFEDERAL LAND

	Area (1000 Acs.)	Average Erosion Rate (Tons/Acre/Year)	Total Erosion (Tons/Year)	Area Eroding At <= T	Area Eroding At > T -- 2T	Area Eroding At > 2T
Cropland-All	21.0	8.1	170.9	5.3	4.7	10.9
Row Crops	7.0	9.5	66.3	1.1	1.7	4.3
Pastureland	57.7	.7	39.3	54.8	1.6	1.3
Forest Land	363.4	.8	302.6	350.3	5.8	7.3
Minor Uses	34.2	203.7	6,965.2	19.9	1.6	12.7
Total	476.3	15.7	7,478.0	430.3	13.7	32.2

Source: 1982 NRI, adjusted by SCS county personnel and state workgroup.

RURAL NONFEDERAL LAND NEEDING CONSERVATION TREATMENT BY LAND USE, 1982

	Cropland	Pastureland	Forest
----- 1,000 acres -----			
Area Needing Treatment			
For: Erosion Control	16.4	0.3	2.4
Other	0.2	27.8	276.8
Percent Adequately Protected	21	51	20
Percent Needing Treatment	79	49	77
Percent Not Feasible to Treat	0	0	3

Source: 1982 NRI, adjusted by SCS county personnel and state workgroup.

FLOOD PLAIN LAND USE & AGRICULTURAL FLOOD DAMAGES, 1982

County Area	Floodplain Type	Flood Plain Land Use Acres -----							Average Annual Flood Damages			Number of Sub-W/S In County
		Total	Cropland	Pastureland	Forestland	Urban	Other	Water	Total \$	Cropland \$	Pasture- land \$	
	Tributary	26,539	594	4,060	21,044	519	322	0	32,300	20,100	12,200	-
	Riverine	11,800	638	244	7,286	291	40	3,301	24,300	23,600	700	-
	Total	38,339	1,232	4,304	28,330	810	362	3,301	56,600	43,700	12,900	21

Source: Flood plain land use, USDA-SCS, Auburn, AL.



WASHINGTON COUNTY, ALABAMA  
1982 Resource Data

Washington County's population is predominantly rural. Its nonfederal rural land area is distributed as follows: 3 percent cropland, 5 percent pastureland, 91 percent forest land, and 1 percent in minor uses. Soybeans, hay, and corn are the principal crops grown. The county ranks 54th in the state in the value of crop sales, 31st in livestock and poultry sales, and 5th in timber sales. The average sheet and rill erosion rate on cropland, 5.4 tons per acre per year, is 24 percent below the state average. Approximately 60 percent of the cropland needs conservation treatment.

	Population, 1960-1980 1/		
	1960	1970	1980
Rural	15,372	16,241	16,821
Urban	0	0	0
Total	15,372	16,241	16,821

		Major Crops 1982	Acres Harvested 1982 4/
Number of Farms, 1982 2/	466	Soybeans	8,000
Avg. Size of Farms, 1982 2/ (Ac.)	208	Hay	4,100
Value of Sales, 1982: (Thou. Dollars)		Corn	3,400
Crops 2/	1,786	Cotton	1,460
Livestock and Poultry 2/	11,063	Wheat	1,000
Timber Sold 3/	18,177		

- 1/ U.S. Census of Population--Urban population consists of all persons living in places (incorporated or unincorporated) of 2,500 inhabitants or more.  
2/ 1982 Census of Agriculture.  
3/ Trees -- Alabama's No. 1 Money Crop in 1982, C. W. McKee, Alabama Cooperative Extension Service.  
4/ Alabama Agricultural Statistics, 1982 Revised.

COUNTY NAME: Washington

LAND USE, 1982

----- Nonfederal Rural Land -----										
Cropland	Pasture- land	Forest- land	Minor Uses	Total Nonfederal Rural Land	Urban & Built-up	Rural Trans- portation	Federal Land	Census Water	Small Water	Total Surface Area (Census)
					1000 Acs.					
19.7	36.4	613.0	7.2	676.3	3.4	7.2	0.0	5.1	4.8	696.8

Source: 1982 NFI, adjusted by inter-agency county and state workgroups.

SHEET AND RILL EROSION BY LAND USE, 1982  
RURAL NONFEDERAL LAND

	Area (1000 Acs.)	Average Erosion Rate (Tons/Acre/Year)	Total Erosion (Tons/Year)	Area Eroding At <= T	Area Eroding At > T -- 2T	Area Eroding At > 2T
Cropland-All	19.7	5.4	107.0	9.7	7.5	2.4
Row Crops	14.8	6.4	94.8	5.9	6.9	2.0
Pastureland	36.4	.8	28.1	33.2	2.4	.7
Forest Land	613.0	.4	270.4	594.0	5.8	13.2
Minor Uses	7.2	1.6	11.2	5.5	.1	1.6
Total	676.3	0.6	416.7	642.4	15.8	17.9

Source: 1982 NFI, adjusted by SCS county personnel and state workgroup.

RURAL NONFEDERAL LAND NEEDING CONSERVATION TREATMENT BY LAND USE, 1982

	Cropland	Pastureland	Forest
----- 1,000 acres -----			
Area Needing Treatment			
For: Erosion Control	11.0	1.0	3.4
Other	0.8	22.5	456.1
Percent Adequately Protected	40	36	24
Percent Needing Treatment	60	64	75
Percent Not Feasible to Treat	0	0	1

Source: 1982 NFI, adjusted by SCS county personnel and state workgroup.

FLOOD PLAIN LAND USE & AGRICULTURAL FLOOD DAMAGES, 1982

County Area	Floodplain Type	Flood Plain Land Use Acres							Average Annual Flood Damages			Number of Sub-w/S In County
		Total	Cropland	Pastureland	Forestland	Urban	Other	Water	Total \$	Cropland \$	Pasture- land \$	
	Tributary	90,959	36	1,563	89,228	50	47	35	5,900	1,200	4,700	-
	Riverine	57,336	662	574	53,694	120	102	2,183	20,200	18,500	1,700	-
	Total	148,295	698	2,137	142,923	170	149	2,218	26,100	19,700	6,400	14

Source: Flood plain land use, USDA-SCS, Auburn, AL.

WILCOX COUNTY, ALABAMA  
1982 Resource Data

Wilcox County's population is predominantly rural. Its nonfederal rural land area is distributed as follows: 9 percent cropland, 11 percent pastureland, 79 percent forest land, and 1 percent in minor uses. Soybeans is the principal crop grown. The county ranks 44th in the state in the value of crop sales, 53rd in livestock and poultry sales, and 6th in timber sales. The average sheet and rill erosion rate on cropland, 6.9 tons per acre per year, is 3 percent below the state average. Approximately 61 percent of the cropland needs conservation treatment.

	Population, 1960-1980 <sup>1/</sup>		
	<u>1960</u>	<u>1970</u>	<u>1980</u>
Rural	18,739	16,303	14,755
Urban	0	0	0
Total	18,739	16,303	14,755

		<u>Major Crops 1982</u>	<u>Acres Harvested 1982 <sup>4/</sup></u>
Number of Farms, 1982 <sup>2/</sup>	399	Soybeans	29,000
Avg. Size of Farms, 1982 <sup>2/</sup> (Ac.)	474	Wheat	9,200
Value of Sales, 1982: (Thou.Dollars)		Hay	3,600
Crops <sup>2/</sup>	4,177	Corn	2,400
Livestock and Poultry <sup>2/</sup>	4,622		
Timber Sold <sup>3/</sup>	15,281		

- <sup>1/</sup> U.S. Census of Population--Urban population consists of all persons living in places (incorporated or unincorporated) of 2,500 inhabitants or more.
- <sup>2/</sup> 1982 Census of Agriculture.
- <sup>3/</sup> Trees -- Alabama's No. 1 Money Crop in 1982, C. W. McKee, Alabama Cooperative Extension Service.
- <sup>4/</sup> Alabama Agricultural Statistics, 1982 Revised.



COUNTY NAME: Wilcox

LAND USE, 1982

----- Nonfederal Rural Land -----										
Cropland	Pasture- land	Forest- land	Minor Uses	Total Nonfederal Rural Land	Urban & Built-up 1000 Acs.	Rural Trans- portation	Federal Land	Census Water	Small Water	Total Surface Area (Census)
50.0	59.7	434.4	2.9	547.0	2.6	6.6	2.2	17.5	6.9	582.8

Source: 1982 NRI, adjusted by inter-agency county and state workgroups.

SHEET AND RILL EROSION BY LAND USE, 1982  
RURAL NONFEDERAL LAND

	Area (1000 Acs.)	Average Erosion Rate (Tons/Acre/Year)	Total Erosion (Tons/Year)	Area Eroding At <= T	Area Eroding At > T -- 2T (1,000 Acres)	Area Eroding At > 2T
Cropland-All	50.0	6.9	344.9	27.4	11.4	11.2
Row Crops	37.3	8.9	332.4	16.1	9.9	11.4
Pastureland	59.7	1.3	76.2	52.2	4.0	3.5
Forest Land	434.4	.7	324.7	423.5	1.3	9.6
Minor Uses	2.9	11.9	34.4	2.1	.5	.3
Total	547.0	1.4	780.2	505.2	17.2	24.6

Source: 1982 NRI, adjusted by SCS county personnel and state workgroup.

RURAL NONFEDERAL LAND NEEDING CONSERVATION TREATMENT BY LAND USE, 1982

	Cropland	Pastureland	Forest
----- 1,000 acres -----			
Area Needing Treatment			
For: Erosion Control	26.3	5.1	11.2
Other	4.2	27.6	281.7
Percent Adequately Protected	39	45	32
Percent Needing Treatment	61	55	68
Percent Not Feasible to Treat	0	0	0

Source: 1982 NRI, adjusted by SCS county personnel and state workgroup.

FLOOD PLAIN LAND USE & AGRICULTURAL FLOOD DAMAGES, 1982

County Area	Floodplain Type	Flood Plain Land Use Acres -----							Average Annual Flood Damages			Number of Sub-W/S In County
		Total	Cropland	Pastureland	Forestland	Urban	Other	Water	Total \$	Cropland \$	Pasture- land \$	
	Tributary	48,961	3,460	7,346	37,995	0	152	0	113,000	91,000	22,000	-
	Riverine	67,797	6,020	3,743	45,134	199	1,241	11,460	178,100	166,900	11,200	-
	Total	116,758	9,488	11,089	83,129	199	1,393	11,460	291,100	257,900	33,200	18

Source: Flood plain land use, USDA-SCS, Auburn, AL.

WINSTON COUNTY, ALABAMA  
1982 Resource Data

Winston County's population is predominantly rural. Its nonfederal rural land area is distributed as follows: 4 percent cropland, 18 percent pastureland, 73 percent forest land, and 5 percent in minor uses. Soybeans, corn and hay are the principal crops grown. The county ranks 64th in the state in the value of crop sales, 6th in livestock and poultry sales, and 21st in timber sales. It is one of the leading counties in broiler production. The average sheet and rill erosion rate on cropland, 8.2 tons per acre per year, is 15 percent above the state average. Approximately 78 percent of the cropland needs conservation treatment.

	Population, 1960-1980 1/		
	1960	1970	1980
Rural	11,114	12,520	16,647
Urban	3,744	4,134	5,306
Total	14,858	16,654	21,953

	Major Crops 1982	Acres Harvested 1982 4/
Number of Farms, 1982 2/		
Avg. Size of Farms, 1982 2/ (Ac.)		
Value of Sales, 1982: (Thou. Dollars)		
Crops 2/		
Livestock and Poultry 2/		
Timber Sold 3/		
	Soybeans	1,800
	Corn	1,400
	Hay	1,300
	Wheat	900
	Cotton	80

- 1/ U.S. Census of Population--Urban population consists of all persons living in places (incorporated or unincorporated) of 2,500 inhabitants or more.
- 2/ 1982 Census of Agriculture.
- 3/ Trees -- Alabama's No. 1 Money Crop in 1982, C. W. McKee, Alabama Cooperative Extension Service.
- 4/ Alabama Agricultural Statistics, 1982 Revised.

COUNTY NAME: Winston

LAND USE, 1982

----- Nonfederal Rural Land -----										
Cropland	Pasture- land	Forest- land	Minor Uses	Total Nonfederal Rural Land	Urban & Built-up 1000 Acs.	Rural Trans- portation	Federal Land	Census Water	Small Water	Total Surface Area (Census)
11.1	51.5	213.6	14.5	290.7	3.1	8.2	88.7	11.7	1.9	404.3

Source: 1982 NRI, adjusted by inter-agency county and state workgroups.

SHEET AND RILL EROSION BY LAND USE, 1982  
RURAL NONFEDERAL LAND

	Area (1000 Acs.)	Average Erosion Rate (Tons/Acre/Year)	Total Erosion (Tons/Year)	Area Eroding At <= T	Area Eroding At > T -- 2T (1,000 Acres)	Area Eroding At > 2T
Cropland-All	11.1	8.2	90.9	3.0	2.6	5.5
Row Crops	9.0	9.5	85.3	1.4	2.2	5.5
Pastureland	51.5	.7	48.2	47.7	2.9	.9
Forest Land	213.6	.8	176.5	206.0	3.3	4.2
Minor Uses	14.5	173.5	2,516.2	8.6	.9	5.0
Total	290.7	9.7	2,831.8	265.4	9.7	15.7

Source: 1982 NRI, adjusted by SCS county personnel and state workgroup.

RURAL NONFEDERAL LAND NEEDING CONSERVATION TREATMENT BY LAND USE, 1982

	Cropland	Pastureland	Forest
----- 1,000 acres -----			
Area Needing Treatment			
For: Erosion Control	8.6	1.3	1.4
Other	0.1	23.7	162.7
Percent Adequately Protected	22	51	20
Percent Needing Treatment	78	49	77
Percent Not Feasible to Treat	0	0	3

Source: 1982 NRI, adjusted by SCS county personnel and state workgroup.

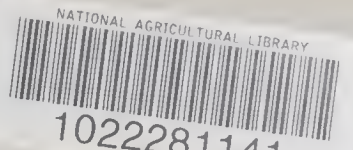
FLOOD PLAIN LAND USE & AGRICULTURAL FLOOD DAMAGES, 1982

County Area	Floodplain Type	Flood Plain Land Use Acres -----							Average Annual Flood Damages			Number of Sub-W/S In County
		Total	Cropland	Pastureland	Forestland	Urban	Other	Water	Total \$	Cropland \$	Pasture- land \$	
	Tributary	7,800	0	807	6,546	0	0	447	2,400	0	2,400	-
	Riverine	13,713	0	0	146	0	0	13,567	0	0	0	-
	Total	21,513	0	807	6,692	0	0	14,014	2,400	0	2,400	15

Source: Flood plain land use, USDA-SCS, Auburn, AL.







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